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# THE BRICKBUILDER

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AUGUST 1912

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NOTICE.—The regular mailing date for THE BRICKBUILDER is the 25th of the month; for instance, the January number was mailed January 25th. The Post Office Department now sends the larger part of the editions of all publications by freight, and this requires an additional time for transportation of from two to eight days, depending upon the distance of the distribution point from the publication city. The publication date of THE BRICKBUILDER will be moved forward gradually so that copies for a given month will reach subscribers even at distant points within that month.



DETAIL OF TOWER, CHURCH OF SAN FRANCISCO, ACATEPEC, MEXICO. Glazed tile of green, orange, and blue colors, applied profusely in combination with stucco ornaments, which are picked out in color.

# THE BRICKBUILDER

AUGUST, 1912

VOLUME XXI.

NUMBER 8.

## The Development of Duplex Apartments. — III. Residential Type.

ELISHA HARRIS JANES.

WITHIN the last few years great changes have occurred in the character of many of our former New York residential sections. So many apartments have been erected in these districts, and business buildings have encroached so upon the finer classes of residences, that in many places it is almost an oddity to see a residence where

leaves the house idle much of the time. These customs, with the increase in the value of the land, assisted in persuading the most conservative that it is convenient to live in an apartment; especially when they are so arranged that the facilities are a little less than those of the private house. Added to this, the successful co-operative feature,



TYPICAL PLAN OF LIVING FLOOR.



FIG. V.

TYPICAL PLAN OF CHAMBER FLOOR.

a generation ago the most exclusive lived. The building of the numerous hotels with their excellent restaurants, their various parlors and elaborate ball rooms for all sorts of entertainments, have changed our customs. A generation ago, dances, dinner parties, and receptions were held in houses, they are now held in hotels, saving so much trouble and annoyance in the household. We entertain our guests with afternoon tea at these hostleries instead of at home, removing another use of the house.

The growing desire of frequent trips of a month or two during the different seasons, and the charm of living a great part of the year in the country houses or estates, which have many of the facilities of a town house,

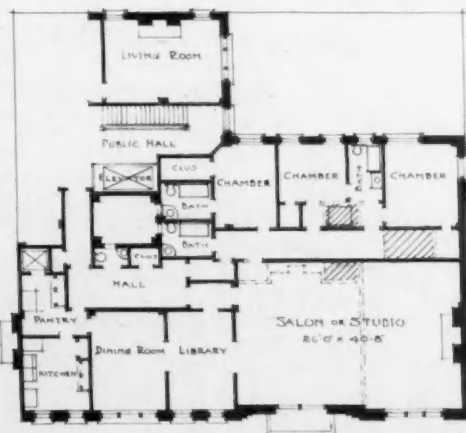


FIG. VI.

which had been used with the studio apartments, seemed to overcome the last barrier. It still retained for them that social exclusiveness which people had been able to maintain in their private houses. In the starting of the building they were able to select whom they would for co-owners, to form strict regulations for the disposal of, subletting, or renting of any separate apartments; and, as in a social club, they were able to say who their neighbors should be and with whom they should ride in the elevators.

With this final decision came the problem of how they should get more seclusion and privacy than were obtained in the layouts of the majority of the apartment houses.

Here comes the difference between the causes of the introduction of the earlier and later duplex apartments. We have seen in the early ones that the cause was an attempt to meet first the necessity and then in an economical manner, the requirements. But in the majority of the present duplex apartments, the question of the two stories and staircase is principally a matter of sentiment.

There are many apartments that have been built on a single floor, where with the exception of the ceilings of the living rooms being lower than in private houses, all the other advantages are supplied. The parlor, reception room, and living rooms are grouped about a foyer hall immediately at the entrance; the bedrooms and sleeping quarters are completely shut off from the foyer hall; and servants' quarters are likewise shut off with the kitchen and pantry. The conservatives though could not be convinced that this gave the necessary seclusion. They had, however, seen the duplex studio apartment, which, with the introduction of the small staircase, reminded them of their country houses. They imagined there would be more privacy to a second story, so stairs were introduced, although by studying the plans it would seem that the amount of space occupied by them was wasted, and the occupants simply put to the inconvenience of mounting them.

A building which might be said to illustrate the transition from the studio to the residential duplex apartment is shown in Fig. V. This shows some of the catering to the whims and fancies of human nature, and the influence of the mystic word "studio." This building is situated on a south-east corner. In studying it consider that a studio requires north light. In this, three studios have west light and one has east light. If we compare this one with that of Mr. Platt's in the last article, we see that the practical use of the studio has been disregarded. But why, then, have a studio? We wonder if it is because the selec-

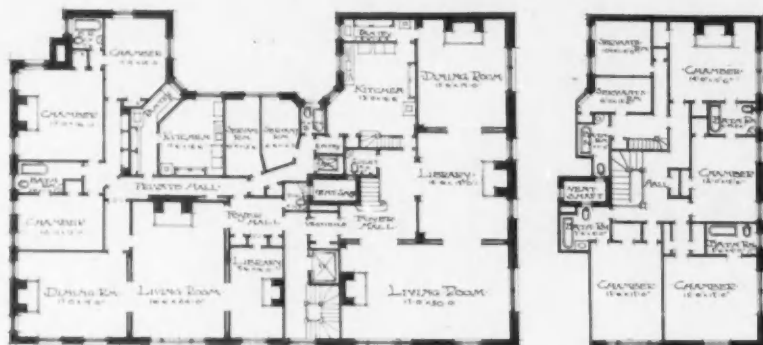
tion of apartments is generally left to the woman, with whom so often one small detail or feature which pleases perhaps her taste, perhaps her vanity, influences her in the selection, where a greater fault or defect is overlooked.

Can you not imagine this: Mrs. Apartment Seeker has been to a tea or reception at Mr. Artist's studio apartment and has seen his magnificent studio as part of an apartment, to him, a necessity. Such an attractive place for his "soirée" and so appropriate for the display of his pictures and work. How lovely it would be for her to give

such teas and musicales, how effective. She immediately starts looking for one, and that room will be the main consideration in the renting of the apartment; only those will be looked at which have a studio.

Where an apparent necessity causes a room to be planned or designed out of proportion in this manner and to a certain extent distorted, and when the necessity of it is clearly seen, the defect generally vanishes. This is the case with the studio apartments. But does this apply to a room designed with distorted proportions with no apparent reason, save it be another room of a suite? This appears to be the case in the apartment shown. There is no attempt or aim made toward giving the studios the north light, clearly showing that the use is for other purposes than as a studio. It is simply using of the area of two floors for a meaningless effect. Whether it is more profitable to have the same area on one floor, or in other words, a salon 21'6" x 43' with a lower ceiling, has not been tested. If the attractiveness of the high ceiling and sentiment persuades the public to pay the rent for the additional floor space, the question of course is answered.

In this building, viewed from an economical standpoint, see what an attractive apartment can be obtained if the plan is rearranged as shown in Fig. VI. The grouping of rooms and details has been kept intact, but the duplex feature has been omitted and the salon made one



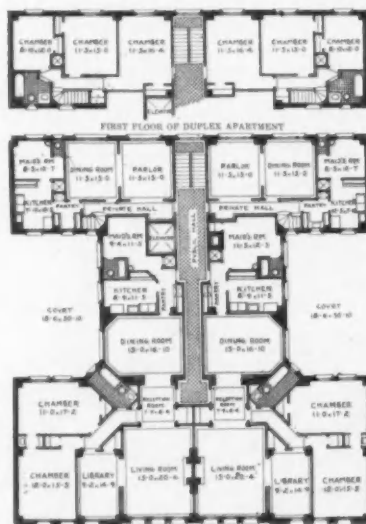
TYPICAL APARTMENT.

LOWER FLOOR.

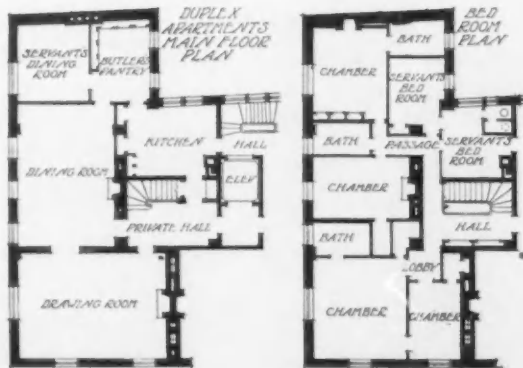
UPPER FLOOR.

APARTMENTS, 901 LEXINGTON AVE., NEW YORK CITY.

Rossiter &amp; Wright, Architects.



APARTMENTS, 145 E. 35TH ST., NEW YORK CITY.

FIG. VII. APARTMENTS, NEW YORK CITY.  
Walter B. Chambers, Architect.

story high. The salons of apartments *a* and *b* are thrown together on one floor with the library, dining-room, and kitchen of apartment *b*, and the chambers and bathrooms of apartment *a* are placed on this same floor. The amount of space saved that may be used in enlarging the rooms is hatched in. By means of the two doors between the living rooms and sleeping suites, just as much privacy and retirement is obtained; on the other hand, we do not have to climb the stairs to our chambers, and incidentally have larger rooms. The cost of a servants' elevator and twelve flights of stairs is saved, amounting to at least \$6,000. There is saved in rentable area

963 square feet in salons on six floors, or 5,778 square feet; and in the miscellaneous portions 136 square feet in each of the twelve stories, or 2,856 square feet, making a total of 8,634 square feet in floor space which has been sacrificed in only half of the building, and this in order to have twelve rooms with excessively high ceilings. This divided between twelve apartments is about 730 square feet per apartment. If we consider the rental value as \$1.50 per square foot, which is reasonable, it means a rental of \$1,095 sacrificed for each apartment, unless the tenant pays that additional price for the duplex, studio, and stairs. Does he?

There are five types of the duplex apartments.

*Type one*—of which we have only the early examples, as none are built now.

*Type two*—where the floor area is not large enough to warrant two or three apartments on a floor, and by the arrangement of making one duplex apartment, one is able to place respectively three or five on two floors.

*Type three*—where one floor, devoted entirely to the living rooms, has high ceilings, and the other floor devoted to the chambers has low ceilings, thus gaining from two to three feet in height in every other story.

The objects and reasons for the above examples are very clear.

*Type four*—where they are all duplex apartments, the ceiling heights all the same, and the bedrooms are directly over the living rooms.

*Type five*—where they are all duplex apartments, and the living rooms of one are over the living rooms of the other, and the chambers of one are over the chambers of the other.

In the last two types it is difficult to see just what is gained except a satisfying of sentiment and the attractiveness of a stairway.

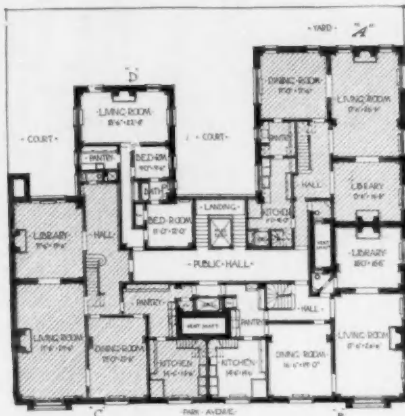
The second type, in which three or five apartments are put on two

floors, is a very clever, logical, and economical method of arrangement of the plan. It has been brought about by the demand for large apartments.

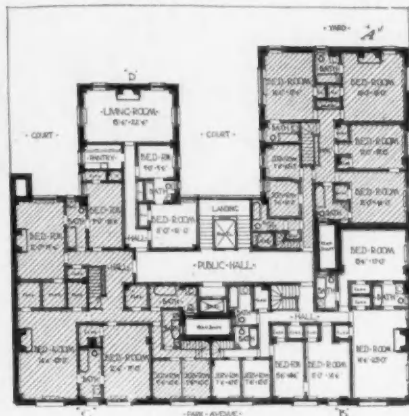
The apartment at 901 Lexington avenue, by Rossiter & Wright, is a good example of where the plot was not large enough for two apartments; accordingly on each floor was arranged a single apartment of nine rooms, and after this apartment was laid out only room sufficient for four or five rooms remained. By throwing the four or five rooms on the two floors together they obtained an excellent ten-room apartment. This is one of the most legitimate reasons for a duplex apartment.

The apartment at 145 East 35th street is still another example, and shows to the greatest advantage the use of the extra space in the duplex apartment. In this building, at first glance it

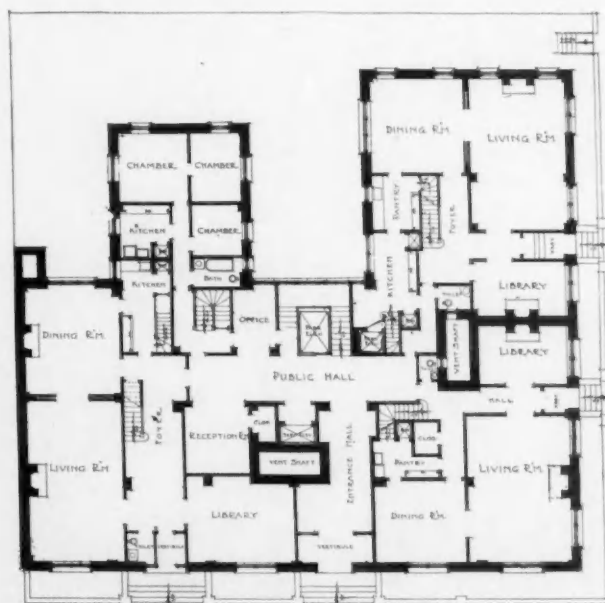
appears as if the same results could have been obtained by having the entire rear one apartment, but the tenement house law required that the public hall should extend to the window. It would not do to have the window on the side or on the courts, as the hall would extend too far in either direction. This necessitated dividing the rear portion, leaving only space for four rooms together, which was useless, but by the use of the stairs two very charming



TYPICAL MAIN FLOOR PLAN.



TYPICAL CHAMBER FLOOR PLAN.



FIRST FLOOR PLAN.  
APARTMENTS, 925 PARK AVE., NEW YORK CITY.  
Delano & Aldrich, Architects.

seven-room apartments were arranged. In the portion of the plan shown in Fig. VII, type three is well illustrated. By the small space lost on account of the stairs, the advantage gained is to have the living room ceiling 12 feet high and that of the chambers 9 feet high. This is frankly and very agreeably shown in the elevation by the unequal height of the stories.

Apartment at 925 Park avenue is an excellent example of the fourth type and one of the most complete duplex plans. It even gives a servant "duplex" stairs, although to do it about 170 square feet per floor is sacrificed, and additional expense incurred of two flights of stairs per apartment. The same question arises, could not the same effect be obtained if the living rooms of apartment *a* were together on the same floor with the chambers of apartment *d*, and with slight modification as to the location of the servants' quarters? A successful detail about this apartment has been the introduction of the small three-room apartments in some spare space in the rear. These have become very popular and are very good renters. An added novelty has been planned on the first three floors. Practically three private houses of three stories are grouped together, each having their own private entrance as well as the entrance from the main hall of the building.

Fig. VIII shows an apartment which would come under this class. In it they endeavored to give a variety of types of apartments. In apartment *a*, we have the large duplex; in apartment *b*, the small duplex in the rear; in apartment *c*, a

small one-story apartment. All of which is a very good idea. But why introduce the stairs in apartment *a*, why not devote all of the front of the second story, adapting the same arrangement of chambers and baths as on the third floor in the position of apartment *c*, and on the third floor introduce two apartments like type *c*, side by side. The gain in space and expense is very clear.

The fifth type is very difficult to understand. Can anyone explain the use of the stairs? A short hall with two doors surely effects the same privacy and allows the chambers to be retired from the sounds of the living rooms, better than the stairs, which do not have doors top and bottom, but have a well up which sounds travel easier than on the level. The two examples illustrated (Figs. IX and X) do not even give the advantage of an entrance to the public hall from the chamber floor.

Is not the only answer, that in order to satisfy sentiment, the whims of the public, or to bow to the mystic word "duplex," a stairway is put in for the only purpose of making people, when they are tired and ready to retire, climb a flight of stairs before they can do so? It is truly a case of where the "public wants to be humbugged."

But after all we must remember that in a commercial building — and apartment houses must be so considered — whatever may be the advantage or disadvantages from a theoretical or esthetical point of view, those conditions which please the public, and influence and persuade them to rent, are really the first to be considered.



FIG. IX. LIVING AND BED ROOM FLOOR PLAN.

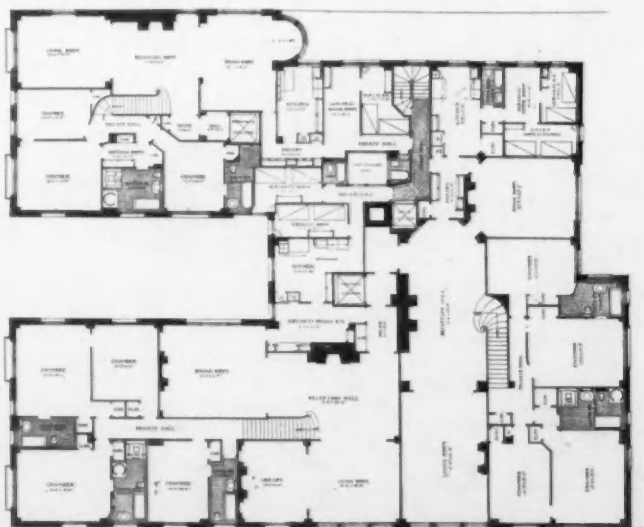


FIG. X. TYPICAL FLOOR PLAN.

## Notes on Hospital Planning.—II.

S. S. GOLDWATER, M.D.,

*Superintendent, The Mount Sinai Hospital, New York.*

ONE of the first duties of the hospital architect is to insure an adequate supply of fresh air to every part of the hospital. The need of clean air in abundance must be considered in the selection of the site; it should influence, also, the position and form of the buildings, the size and shape of wards, the form and arrangement of the out-patient division, the plan and treatment of operating-rooms, sink-rooms, kitchens, laundry, workshops, stairways and corridors, the location and character of the nurses' and servants' dormitories.\*

The consideration of the subject of ventilation is peculiarly difficult at this time because the authority of all the traditional principles is questioned. A few years ago the advocates of indirect ventilation spoke with undisputed authority as the exponents of a system which was assumed to be positive, physiological, and scientific; to-day they are struggling against a steadily increasing army who demand direct ventilation through the open window. Against direct ventilation it is argued that our climate is such that windows cannot always be opened; that city air is often so dust and germ-laden that it ought to be washed and filtered; that in operating-rooms windows simply cannot be opened; and that drafts are invited by direct cross-ventilation, and are dangerous. But those who believe in direct ventilation have no difficulty in pointing to indirect systems which in one way or another have failed. They cite examples of such systems installed at great expense and abandoned as unnecessary. They cry out against the objectionable qualities of "canned" air; protest against accumulations of dirt in inaccessible ducts; point to glaring errors in the size and location of air inlets and outlets; cite the high cost of operating an indirect system; show that in many localities, during the greater part of the year, windows may be opened without the slightest discomfort to anybody.

The engineer who advocates indirect ventilation usually begins by arming himself with physiological data; thus fortified, he proceeds to demonstrate the practicability of conditioning, introducing, and circulating a physiologically sufficient volume of air. He takes pains to examine the source of supply and the quality of the air introduced; to wash the air, if need be; to warm it in winter; to cool it in summer, perhaps; and, in rare instances, to regulate its moisture. Working along these lines with mathematical precision, the engineer solves his problems on paper, and assumes that a vexed question has been disposed of. But the practical man is not always susceptible to the influence of scientific

reasoning; he asks for facts, and the engineer, nothing loath, promptly produces eloquent pictures of hospital conditions "before using" and "after using" indirect ventilation; hospitals, like individuals, he tells us, sometimes reform.

It would seem almost impossible to exaggerate the value of proper hospital ventilation, but the enthusiast accomplishes such exaggeration almost without an effort. It is only a few years since a distinguished ventilating engineer told the readers of THE BRICKBUILDER that in a certain hospital, under "old conditions," the death rate reached fifty per cent; while during a later period, with improved sanitary conditions (that is to say, following the introduction of an indirect ventilating system), the death rate fell to five per cent; "so that there would seem to be as ample reason for the installation of suitable ventilation as for the provision of medicine." Really one cannot stand by unprotesting while a ventilating engineer, however well-meaning, calmly appropriates the laurels of the historic heroes of scientific medicine. Is it assuming too much to say that the changes in hospital practice which grew out of the work of Lister and Pasteur; in other words, the discovery of the cause of infections and the consequent introduction of aseptic methods, have had something to do with the remarkable reduction in hospital mortality which has taken place during the past thirty years? A reduction in mortality from fifty per cent to five per cent without this aid, and as the result of the introduction of ventilating ducts and fans alone, is incredible.

It is disconcerting to learn that the old physiological ground-work for a scientific system of ventilation has been seriously undermined; but such is the fact. One series of experiments, startling and bewildering, appears to demonstrate that the maintenance of the chemical purity of the air, which was the primary object of all efforts at ventilation in the past, is really of no consequence. Then one learns that one may no longer assume that the temperature of occupied rooms should be kept uniform; indeed, the preponderance of present opinion strongly opposes uniformity of temperature, and finds virtue in the natural day-and-night variation. And now the clinician clamors for means to treat each patient on his individual merits; he demands one atmospheric condition for the pneumonia patient who is in need of respiratory stimulation, and another for the nephritic whose poor circulation and cold extremities suggest a warm and comfortable room, in contradistinction to the cold air, preferably out-of-doors, in which the pneumonia patient thrives.

It is not proposed here to analyze or discuss the underlying physiological principles of ventilation. We shall assume that it is everybody's wish to provide fresh air in abundance for all parts of the hospital. Whether carbon dioxid is or is not harmful, we shall take it for granted that its presence in an unusual degree is an indication of the co-existence of impurities which are objectionable if not noxious. Let animals be used to demonstrate the extreme tolerance of the living organism to poisonous gases; the demonstration is of interest to science, but

\* In the planning of the wards of American hospitals the need of fresh air is rarely overlooked; the problem may not be solved, but an attempt to solve it is invariably made. But in the planning of out-patient departments, where the need of ventilation is singularly pressing, American hospital architecture is lamentably deficient. The prevailing indifference to the ventilation of the out-patient department is part and parcel of the relative neglect of this department in matters of administration generally. It is no uncommon thing in this country to observe a hospital whose in-patients are cared for in accordance with the highest standards, but whose out-patients are accorded the most niggardly treatment possible. In this respect, if in no other, American hospitals and their architects may go to school to England, where out-patient departments and hospital wards are planned with equal care.

need not in any practical way concern the hospital administrator. In hospitals the demand is for fresh air in plenty. The question is how to obtain it, day and night, summer and winter, for all parts of the hospital, under ordinary working conditions; and this question cannot be answered intelligently without an intimate view of the hospital in actual operation. The intimate study of actual hospital conditions may show that in the matter of ventilation no degree of skill in either architect or engineer can insure the desired result; that the ventilation of a hospital is primarily a problem of administration; that efficiency depends not so much on the presence of mechanical aids to ventilation as on their actual and proper use; not so much upon the disposition and size of windows as upon transoms actually open and sashes actually raised. If this is so, what can the architect do, first to provide means of ventilation, and then to facilitate their constant and effective use?

One method of insuring the use of apparatus for artificial ventilation is to make natural ventilation impossible. This has been done in the notable instance of the infirmary at Belfast, far famed for its windowless wards. Another method is to use windows for light, but not for air—to fasten them securely so that they cannot be opened. Of these two methods, the Belfast method only can be guaranteed, and it is a method which nobody yet has been inclined to follow. The second method, that is, the fastening of windows, proves in most instances to be ineffectual. Sooner or later someone wants the windows opened, and however excellent the ventilating system, it cannot compete, at certain seasons of the year and in favorably situated hospitals, with the kind of ventilation that is obtainable through large open windows, placed on opposite sides of a ward. And, of course, the ventilating system is not always perfect.

The fate of one such system, in a New York hospital, was sealed when the visiting physicians, in the words of Dr. Gilman Thompson, discovered that "certain odors, regularly developed in the wards in the early morning, were distinctly noticeable hours after the 'entire air of the ward had been changed repeatedly,' according to the engineer's calculations." Then, continues Dr. Thompson, "we ventured to open the windows for a few moments each day; the odors disappeared, but the ventilating system was thrown out of gear. Somehow, the patients began to look better; anemia quickly disappeared. Even the nurses noticed the improvement and had fewer headaches." Is it surprising after this to learn that the ventilating system was eventually abandoned?

There is a third method of forcing the use of ventilating apparatus—a method which is favored by a school of hospital architecture which has its principal seat in Chicago. This method is to plan the hospital with an eye to cheapness of construction. The result of this method is the production of buildings of exceedingly simple exterior design, with interior corridors surrounded on all sides by wards and service-rooms; in the absence of cross-ventilated wards and with corridors open nowhere to the outer air, the conditions are likely to be such as to compel the active operation of all the available machinery of ventilation at all seasons of the year. Comment on this method is not necessary.

The inability of ventilating apparatus to move large masses of air as freely as nature moves them, or with the

same stimulating and pleasurable effect, justifies the preference of many hospital workers for the open ward window, where the conditions are favorable to its use. It does not justify the total omission of ventilating apparatus in localities where the extreme cold of winter renders the opening of ward windows impracticable, or from hospitals the wards of which are subject to overcrowding. Moreover, we must remember, in this connection, that a hospital does not consist of wards merely, and that each part of the hospital must be treated on its own merits.

The following recommendations in relation to the ventilation of a group of hospital buildings now in course of erection were submitted to and approved by the Building Committee, and are here introduced for the purpose of indicating the variety and complexity of conditions in a single institution:

"I. It is recommended that supply and exhaust ducts, both equipped with electrically driven fans, be provided for the (a) Amphitheater (to insure ample ventilation during lecture-hours), (b) Hydrotherapeutic Department (natural ventilation being impossible here), (c) Operating Rooms (to insure ventilation with closed windows), (d) Out-Patient Department (which will be crowded daily).

"II. That exhaust fans and ducts only be provided for the kitchen and its accessories, and for the several dining-rooms.

"III. That exhaust ducts be provided for toilets, utility or sink-rooms, laboratories, ward serving-rooms, and day-rooms and dressing-rooms.

"IV. That both supply and exhaust ducts be provided as a reserve for all wards and patients' rooms; but in view of the fact that practical experience in Harlem, Fordham, Mount Sinai, and elsewhere has demonstrated that windows and transoms may safely be relied upon as the chief means of ventilation of wards and patients' rooms, that fans, motors, and intake screens be omitted.

"It is believed that under normal conditions the wards of the new hospital can be ventilated satisfactorily by 'natural' ventilation without the assistance of any mechanical system. It is considered wise, however, to retain for possible future use, the supply and exhaust ducts proposed by the ventilating engineers, so that in the event of persistent overcrowding, satisfactory ventilation may be assured."

Whether or not indirect ventilation is to be introduced in a given hospital, it is a sensible precaution to plan the wards as if it were proposed to rely on direct ventilation exclusively. On this basis large wards, at least, will be exposed on three sides; there will be a window adjoining every bed; there will be a transom for each window; the floor space and cubic space will be ample. Given a proper degree of vigilance on the part of the head nurse and the resident medical staff, and a well-developed interest in ventilation on the part of the nurses generally, a ward planned in the manner indicated can, as a rule, be well ventilated by natural means. But the fulfilment by the architect of the requirements just enumerated will not of itself win the day; *the ward windows must be opened.*

An eminent physician who fills with distinction the position of president of a hospital board, is an enthusiastic advocate of direct ventilation. His great pride in the cool, fresh air of the wards of his hospital is pardonable. The building in question is completely equipped for indirect

ventilation; but the blowers and extractors are idle, because the president and visiting staff are convinced that the ventilation of the hospital by natural means is entirely satisfactory. It is probable that the observations of these gentlemen have been limited almost wholly to morning and afternoon hours. Are night conditions in this or any other hospital identical with those of the day, or must important differences be reckoned with? Let us see.

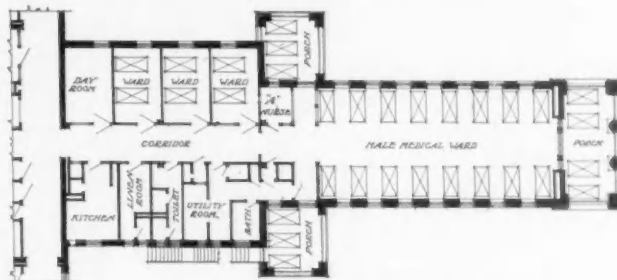
During the day, nurses go back and forth from the ward to the adjacent corridors and service rooms; one by one they leave the ward and the building for "time off," each returning at a different hour. The supervising nurse and the superintendent make their rounds; the visiting physicians and the house staff make theirs. As each one enters or re-enters the ward, coming from out of doors or from other parts of the hospital, he notices the quality of the ward air—is certain to notice it if it is particularly bad. If the air is close, relief is sought and obtained immediately. After the morning "bed-pan hour" there is every inducement to open the windows and freshen the ward—the rules demand it, the personal comfort of the attendants requires it, the chance official visitor insists on it, and, unless the windows are of the kind that cannot be opened, it is done. And there are other favoring circumstances. Throughout the day, patients and attendants pass to and from the adjacent balconies, admitting fresh air with each migration. In pleasant weather a large proportion of the patients are on the balconies or elsewhere outside of the ward during much of the day, and the air of the ward is inhaled and exhaled by only a fraction of the ward's nominal occupants. A score of effective influences thus tend to preserve the purity of the ward air and to promote direct ventilation; and while the day lasts the result is satisfactory, even in winter.

But as the day passes, the scene changes; and yet, while summer lasts, the ward is safe. Imagine, however, a cool night in fall or winter. Staff rounds are over; the patients are in bed; every regular bed is occupied, and a half-dozen portable cots have been placed in the center of the ward to accommodate a temporary overflow. The nurse finishes that part of her work which necessitates physical activity, and barring an occasional interruption, she expects to spend the remainder of the night in the sedentary occupation of chart-writing. The temperature of the ward, with windows open, drops from 65° to 55° or to 50°. The patients, under their blankets, are comfortable—but not so the nurse; shivering in her light linen costume, she presently yields to an irresistible impulse to close the nearest window; a second window is closed, then a third, and finally the ward is shut up as tight as a drum. This is no imaginary picture; on a midnight November visit to a hospital of fourteen wards the writer found six slightly-opened transoms doing duty for all of the fourteen wards. In most of the wards there was not a crevice by which air could directly enter. The nurses craved warmth, and instinctively they provided it for themselves; the patients needed clean, cool air; yet the air that reached their lungs was warm and fetid.

Now, all this is not intended as an unequivocal declaration in favor of the indirect ventilation of hospital wards. It shows, indeed, that there is more need for indirect ventilation in winter than in summer, in night than by day, in a crowded ward than in a ward which is only half occupied.

But this much is certain: if we propose to rely on direct ventilation, we must provide good exposure, plenty of windows, and a warm spot for the night nurse.

It would be a mistake, however, to take the nurse out of the ward and place her in an office apart. Signal systems are all very well in their own way, but the nurse needs to have under her eye as many of her patients as possible; and the patients, oftentimes, need to have the nurse under their eyes. A compromise between leaving the nurse and her desk in the ward, and taking her out completely, has been reached in the ward plan adopted for the Samaritan Hospital at Troy, N. Y. This plan, which is here reproduced, shows a glass enclosure (a) adjacent to the ward entrance, overlooking the ward itself, two small balconies, and the adjoining separation room. This little office has an outside window and a radiator of its own.



WARD PLAN FOR SAMARITAN HOSPITAL, TROY, N. Y.  
George B. Post & Sons, Architects. S. S. Goldwater, Medical Associate.

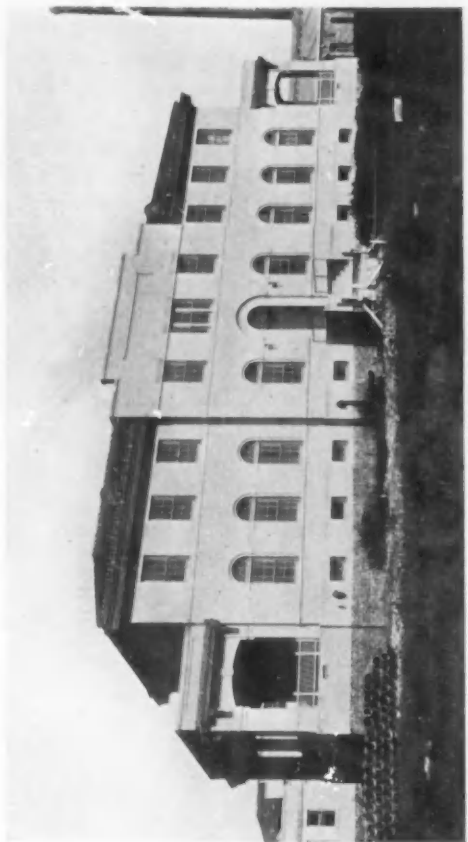
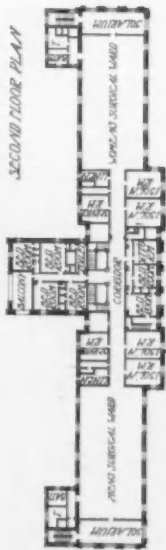
The Samaritan Hospital plan may be used to illustrate several points which have a bearing on the ventilation of the hospital ward. First, the ward corridor leads from a well ventilated general or connecting corridor to the ward proper; but the short ward corridor has no window of its own, and in so far is deserving of criticism. The patients' lavatory opens directly on the ward corridor, the water-closets do not; a complete partition separates the lavatory from the water-closets; each compartment has its own window, and the lavatory section serves as a ventilated ante-room to the water-closet compartment. The water-closet compartment, as is customary, is provided with an exhaust duct.

The utility room is divided into a ventilated ante-room, which is entered directly from the corridor, or indirectly, by means of a ventilated side passage, from the ward. The ante-room contains the sterilizing apparatus and gas-burner; in the inner alcove, which is provided with a separate window and an interior exhaust duct, are the bed-pan sinks, shelves and racks, and the specimen closet—the latter ventilated by means of an opening in the outer wall. Aside from the drying closet and the blanket-heater (enclosed spaces necessarily), there is no closet space connected with the utility room.

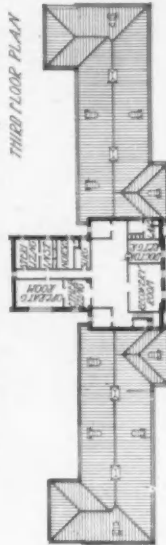
The distribution of balcony space in connection with this ward is somewhat unusual. The two smaller balconies are intended especially for patients in bed, and are so placed as to be constantly under the eye of the nurse. Incidentally they obscure the ward but little. The balcony at the end of the ward may also be used for bed-patients, if desired; but it is more especially designed for the use of convalescents who may not be able or may not wish to use the garden. To provide separate balconies for the acutely sick and the convalescing, is to contribute to the comfort of both.



HOSPITAL BUILDING.

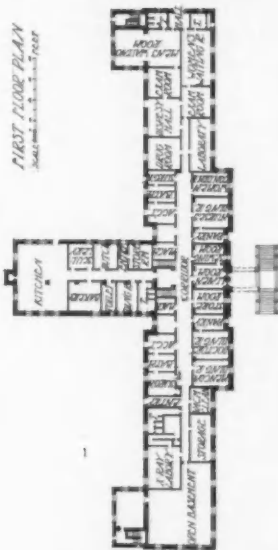


NURSES' HOME.

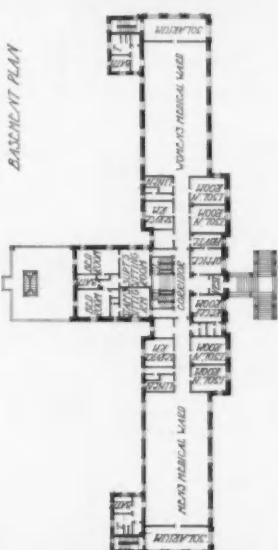


THE CONEY ISLAND HOSPITAL,  
BROOKLYN, N. Y.  
Helmie & Huberty, Architects.

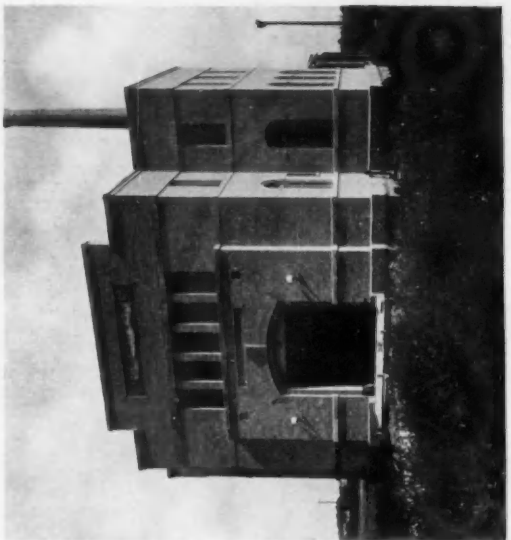
FIRST FLOOR PLAN



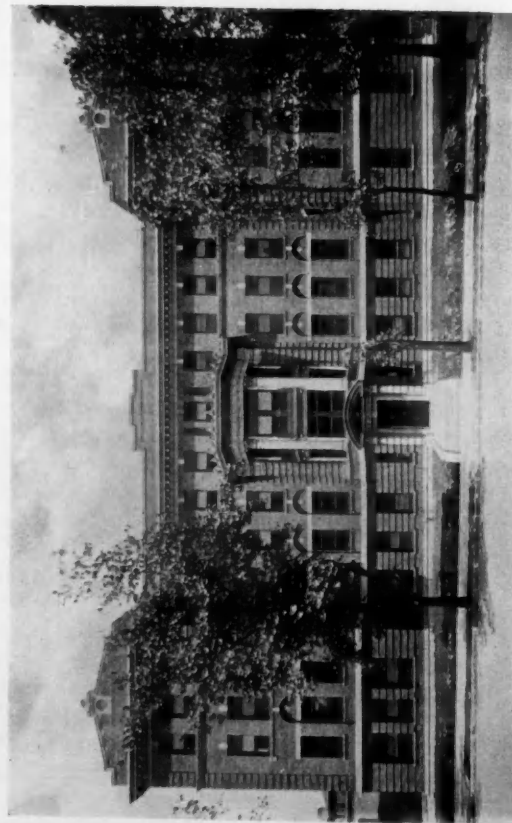
BASEMENT PLAN



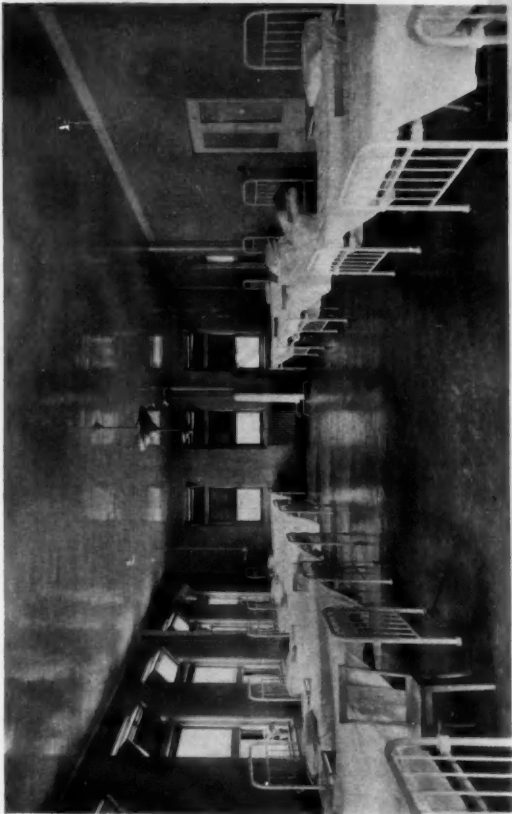
MORGUE.



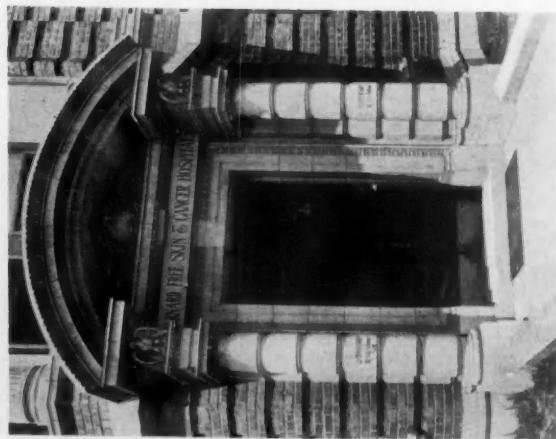
STABLES.



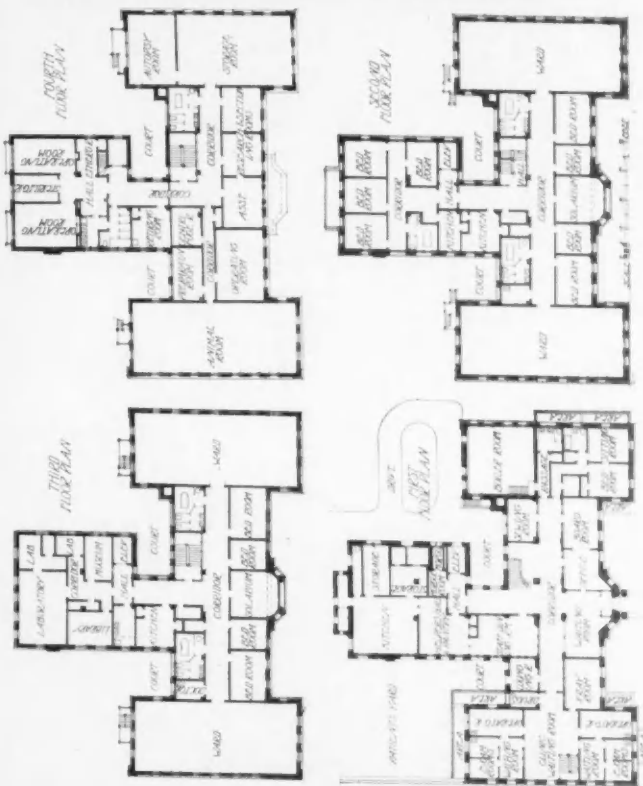
MAIN FAÇADE.



TYPICAL WARD.



MAIN ENTRANCE.  
BARNARD FREE SKIN AND CANCER  
HOSPITAL, ST. LOUIS, MO.



OPERATING ROOM.  
MAURAN, RUSSELL & CROWELL,  
ARCHITECTS.

## Commercial and Manual Training High School, Newark, N. J.

E. F. GULLBERT, ARCHITECT.

(For additional illustrations see Plate Forms.)

THE city of Newark, New Jersey, is to be congratulated on its new Commercial and Manual Training High School. From every point of view it is a dignified structure; but from the front, which is a veritable approach *d'honneur* as it were, it is decidedly distinctive even among the very excellent high school buildings of latter days. This impressive terraced front is the result of architecturally adapting the building to a sharply sloping site, and the gain is more than an artistic one, since every inch of the High street terrace is utilized as part of the plan. Instead of doing the more ordinary thing, taking the higher level for the main façade and letting the back of the building trail down hill with an insignificant exterior, the architect has reverted to the Italian idea of facing his structure towards the lower level overlooking terraces and outside stairways. The splendid result makes one wish that such sites were more common in the city limits where high schools are usually placed, and where they are all too apt to have four backs and no front.

The school is a huge square mass of brick and terra cotta, in Jacobean style, with four corner towers whose crocketed pinnacles in Tudor Gothic are visible from every part of the city. The simplicity of the plan and the beautiful grouping of the windows with substantial brick piers running up between each group, forcibly express the interior arrangement. The choice of the Jacobean or transitional style was a happy one, since it gives that maximum of light which Gothic gives, and allows at the same time that freedom of both Renaissance and Gothic ornament to which terra cotta so admirably lends itself.

The brickwork is an interesting combination of English and American bond; that is to say, every *seventh* course is all headers, while the intervening courses are alternate headers and stretchers. This in no way interferes with the patterning, and if only it is all true brickwork, certainly the wall is well bonded.

The corner motifs are unfenestrated on High and Summit streets, and here the brickwork is particularly effective. These panels extend through three stories, forming fine flanking corners that are a pleasing variation from the necessarily great number of windows stretching across between. They are enlivened by a border of insets and by a series of machicolations across the top which spring from sparkling little terra cotta corbels which are charmingly executed. Interest is again added to the brickwork under the crowning band course in the little semi-hexagonal pilasters and flat niches. To these lofty unbroken brick towers not a little of the building's great dignity is due.

The architectural terra cotta work is confined mainly to the large mullioned windows and the decorative detail. Wherever used it is well moulded and has no extravagant projections suggestive of elaborate steel supports. The architect, realizing that the brick was one color and the terra cotta another, making a sharp contrast that would always endure, has not spotted the secondary material promiscuously over the building in the shape of meaningless quoins and useless bonds and toothing. The sharp contrast just mentioned might be agreeably modified if we

paid as much attention to the *texturization* of terra cotta as has been recently paid to that of brick.

By *texturization* is not meant merely roughening the face of a terra cotta block, but a treatment in low relief of ornament, or perhaps a patterning of some sort, as early English builders made when they stamped the device of the owner in the terra cotta trim at Sutton Place or Oxburgh Hall. By this means terra cotta and brick have weathered together beautifully, each century bringing them into closer harmony.

As has been said, it is the imposing terraced approach to the new High School that most commands attention. The lowest level is a few steps above the sidewalk, and is made attractive by planting and by the introduction of color in the pavement, this latter consisting in an edging of overburnt brick to the concrete panels. From here is a direct entrance into the school, while at each side is an imposing staircase leading to the upper terrace. In this lower entrance and in these outside staircases, terra cotta plays an important part. Around the three-arched entrance it is in low relief, resembling the typical strap ornament of Jacobean days; while on the staircases it makes the balustrades into Jacobean ornament that seems peculiarly appropriate since that period was the first to develop the balustrade after its Gothic invention in France. It is here, and in fact wherever terra cotta has been used in the building, that the material has met in all respects the demands — esthetic and constructional — which has been put upon it.

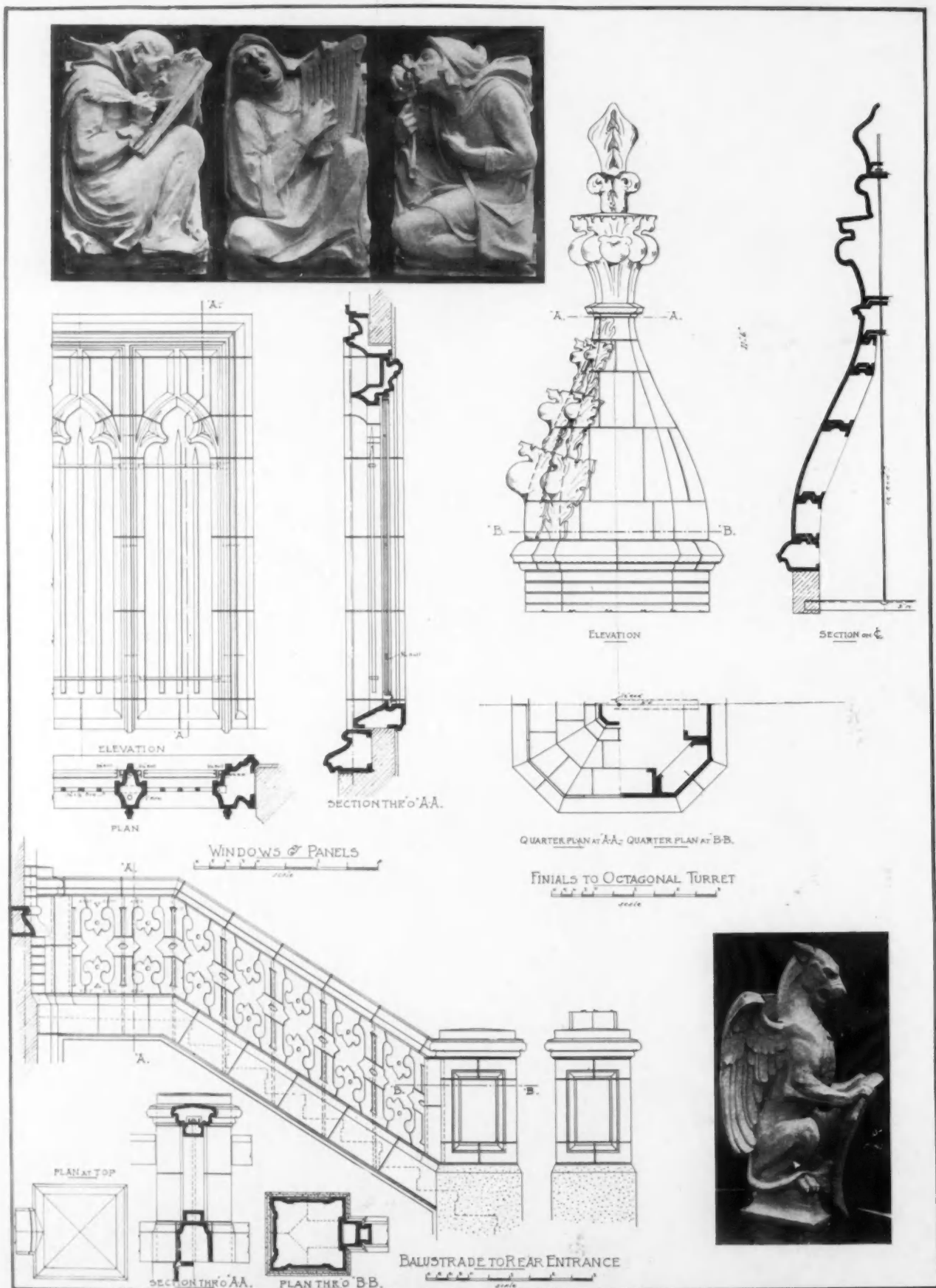
The upper terrace extends the entire width of the building and is of an expanse little dreamed of from below. It too is scored into patterns, but one regrets that the brick edging of the lower level was not repeated here; it would have given scale to this larger area. From here, which must be an ideal gathering spot for groups of students, one can better appreciate the excellent layout below. One notes how carefully the shade tree was retained beside the steps, which is significant of much careful thought to one who knows how simple it is to begin a new public building by razing everything on the site to the ground, and then painfully replanting afterwards.

On this upper terrace is the main entrance, a study of Jacobean in terra cotta with columns and pilasters of yellow marble to lend a color interest and accentuate the importance of the doorway. This leads to an interior made of carefully planned auditorium, library, gymnasium, class rooms, shops for carpentry and masonry, chemical laboratories, lecture rooms, sewing rooms, and all the other departments necessary for complete college preparatory, science, and vocational courses.

Small wonder that school is more attractive to the young of to-day than ever it was before in all history. Small wonder that such a building as this makes the getting of an education pleasant when it provides for the majority of the scholars a happier and more healthful environment than that of their own homes. As for what such a structure can do for a neighborhood, it not only annihilates the old impression that a public school deters the better growth of immediate property, but it actually increases its value. In short, the whole tone of the city is improved by such a schoolhouse as this.



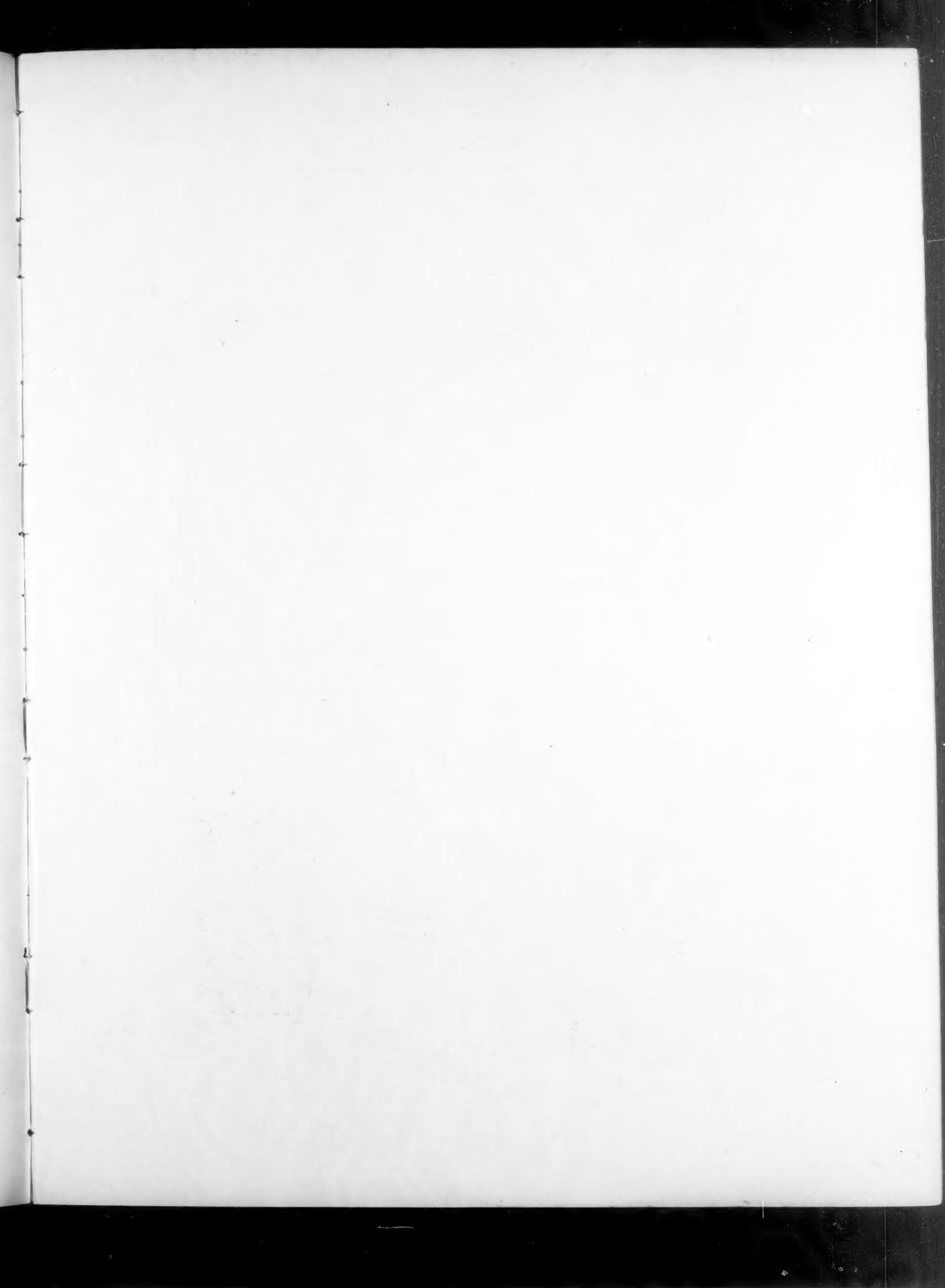
COMMERCIAL AND MANUAL TRAINING HIGH SCHOOL, NEWARK, N. J.  
E. F. Guilbert, Architect.



Terra Cotta Details.

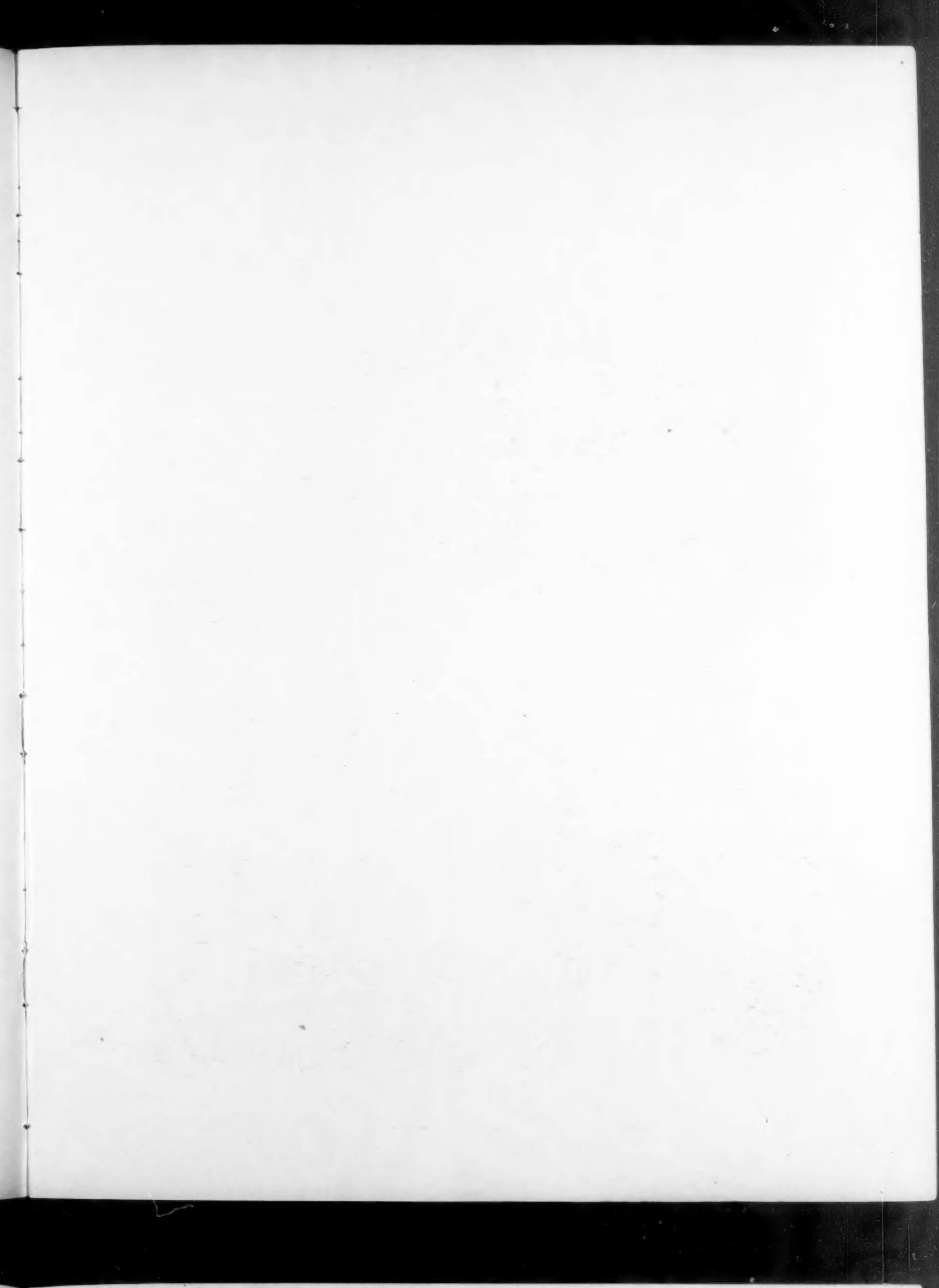
E. F. Guilbert, Architect.

COMMERCIAL AND MANUAL TRAINING HIGH SCHOOL, NEWARK, N. J.



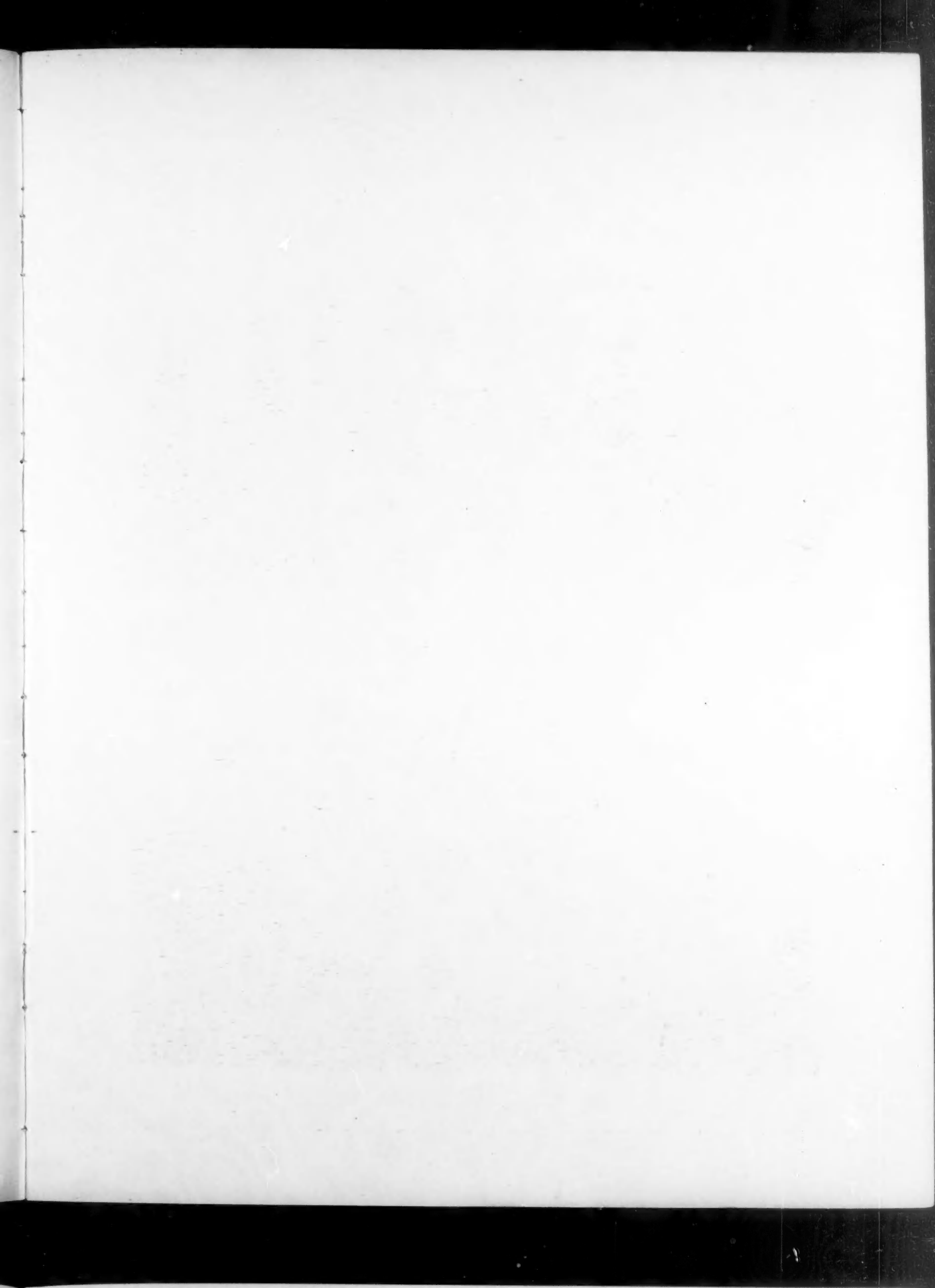


HOUSE AT TOPSFIELD, MASS.  
PAGE & FROTHINGHAM, ARCHITECTS.





HOUSE AT TOPSFIELD, MASS.  
PAGE & FROTHINGHAM, ARCHITECTS.

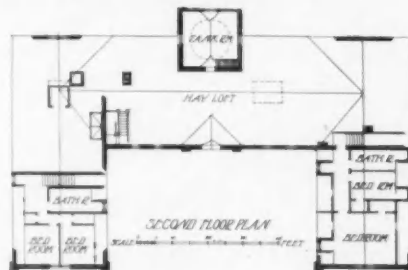




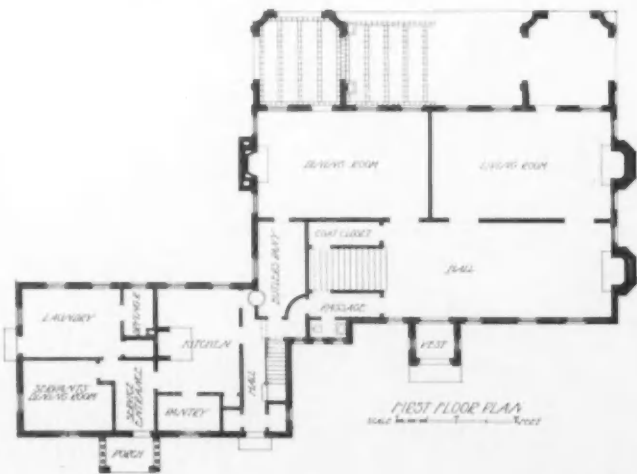
FIRST FLOOR PL.

STABLE AND GARAGE  
WITH PLANS.

HOUSE AT TOPSFIELD,  
MASS  
PAGE & FROTHINGHAM,  
ARCHITECTS.



SECOND FLOOR PLAN

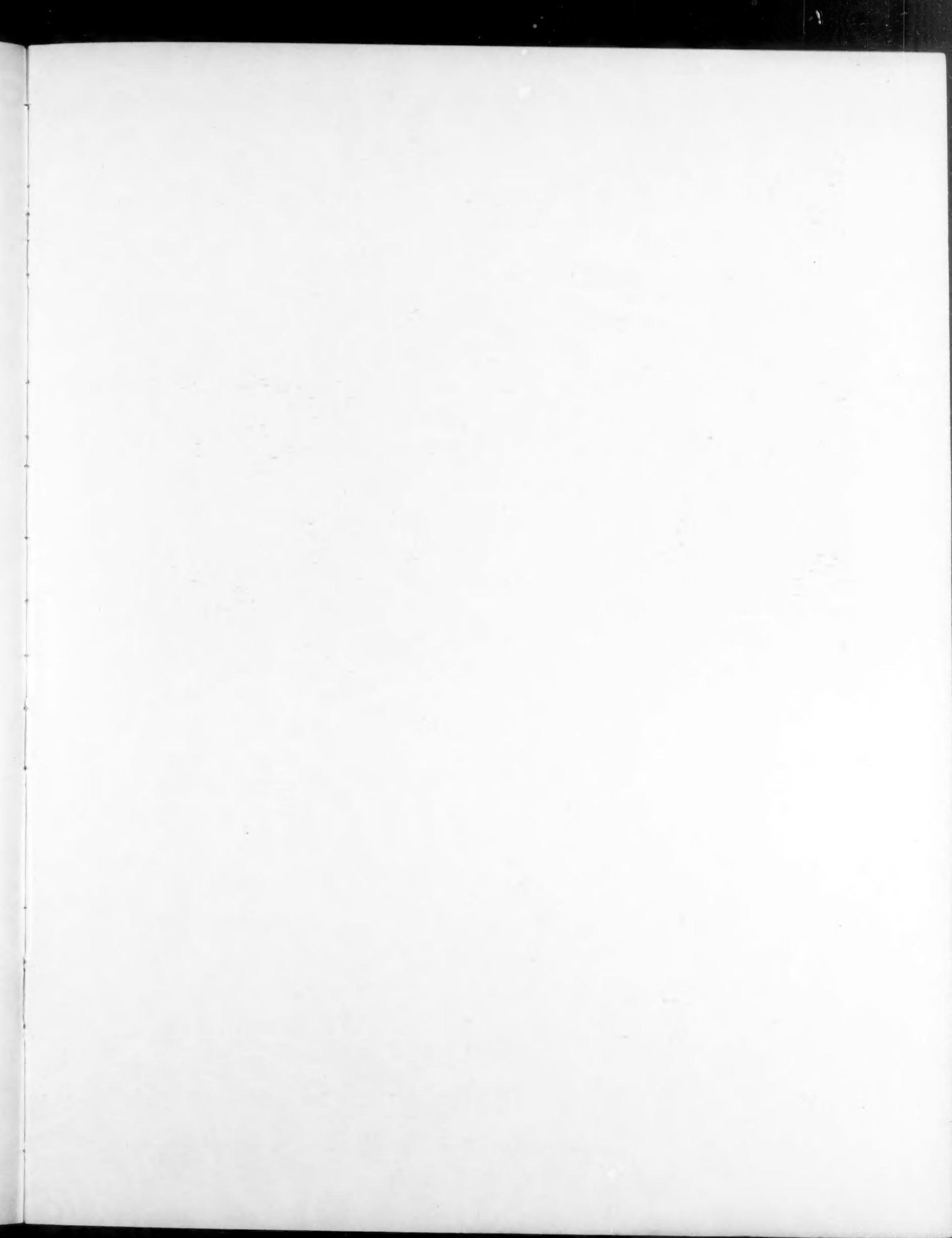


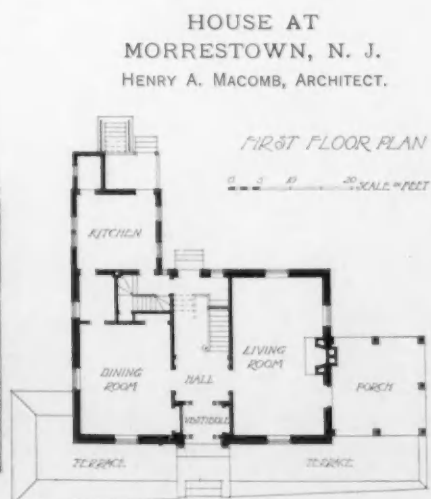
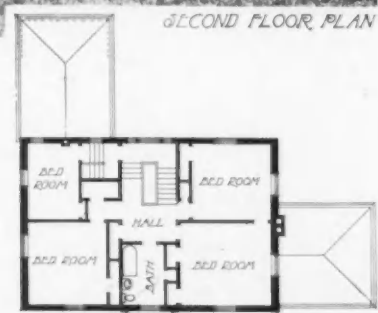
FIRST FLOOR PLAN

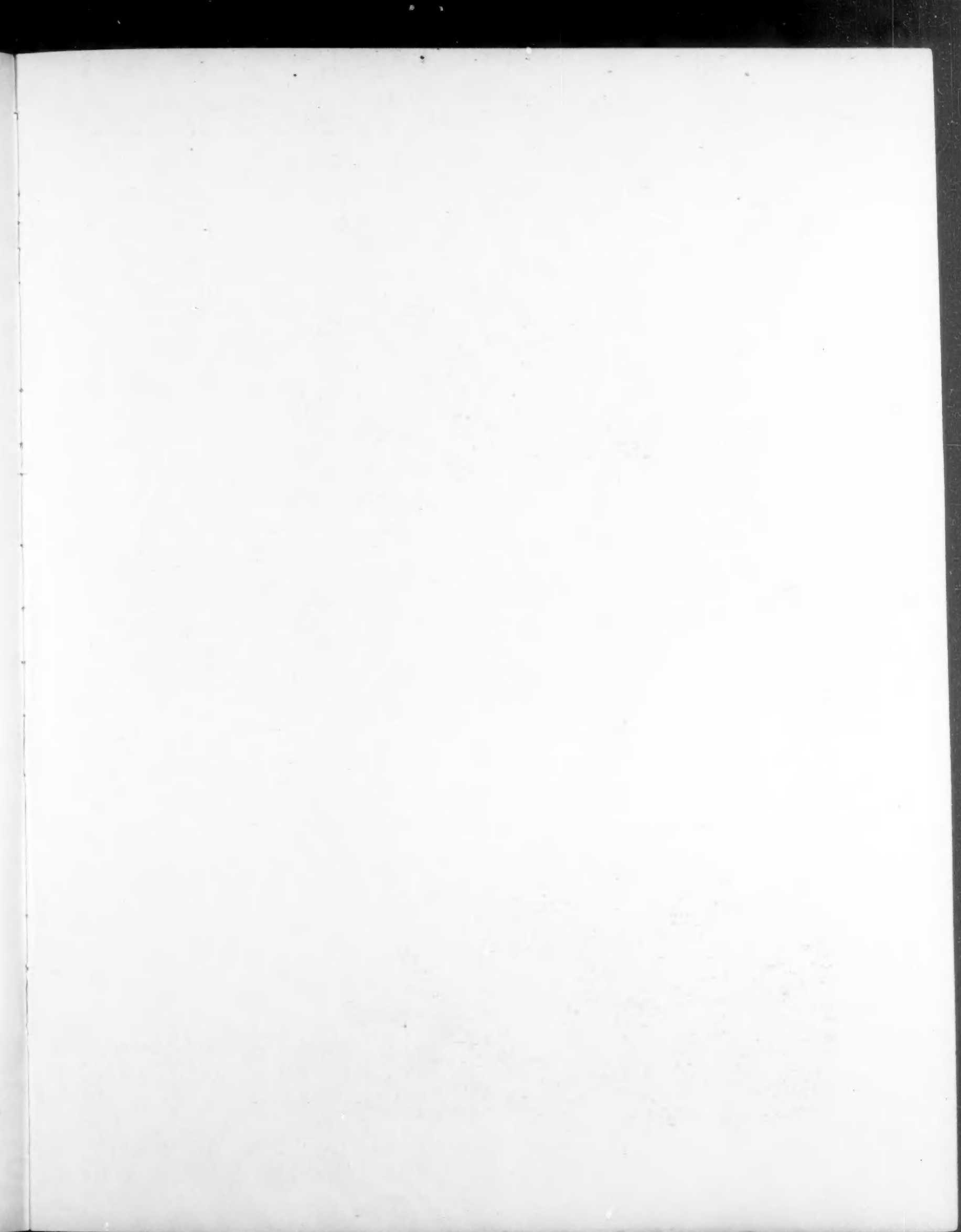


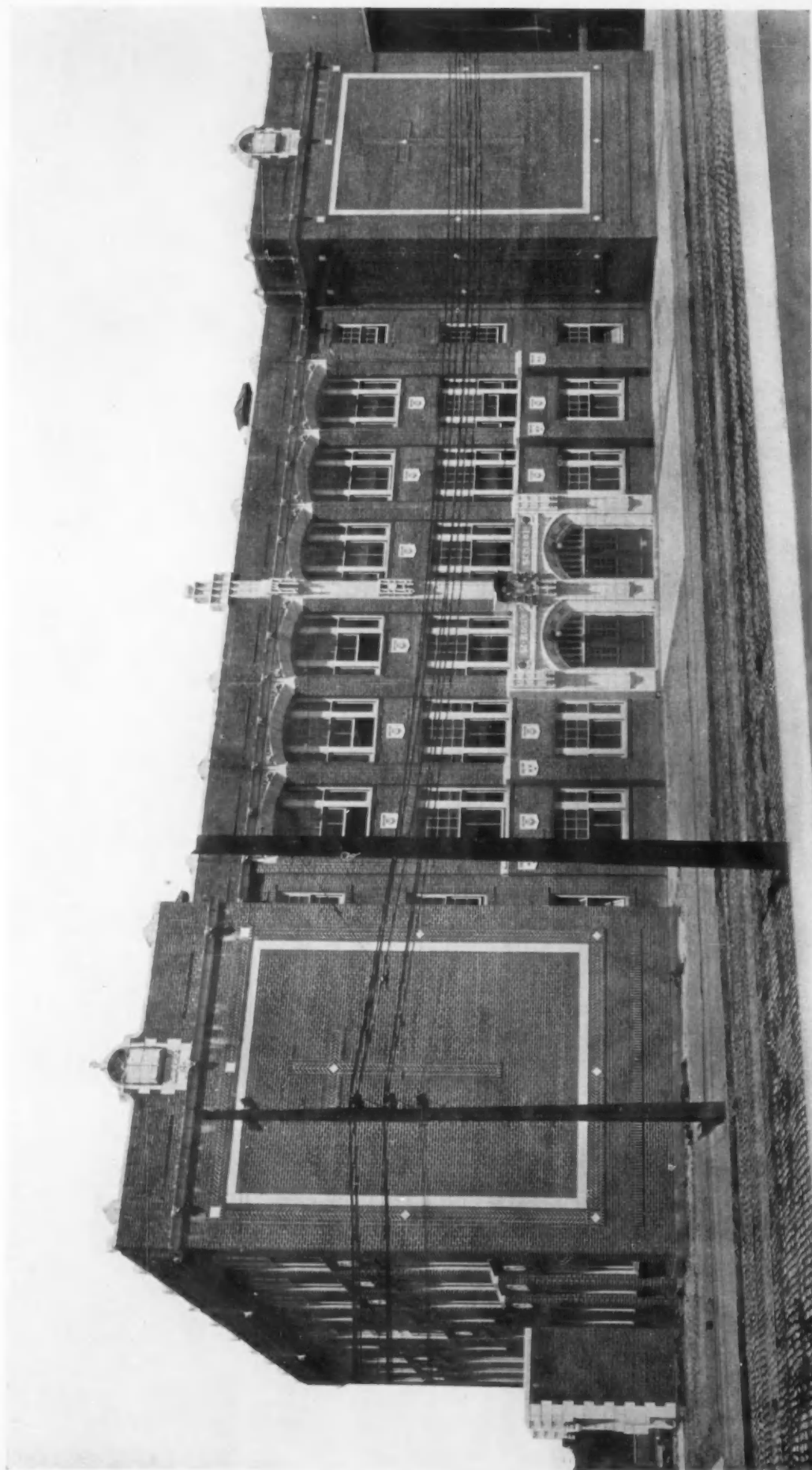
SECOND FLOOR PLAN

PLANS OF HOUSE AT TOPSFIELD, MASS.

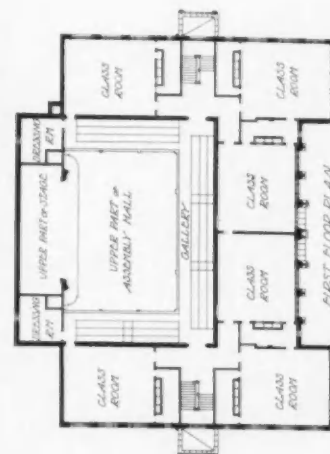
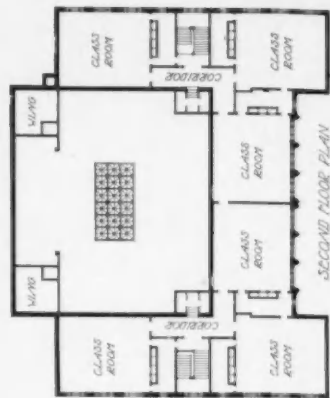




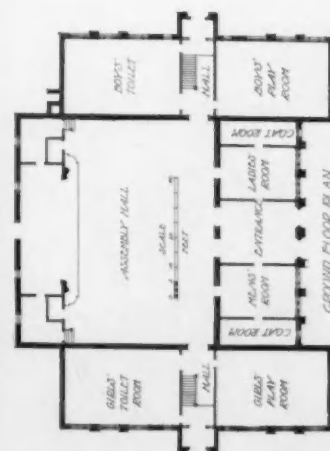


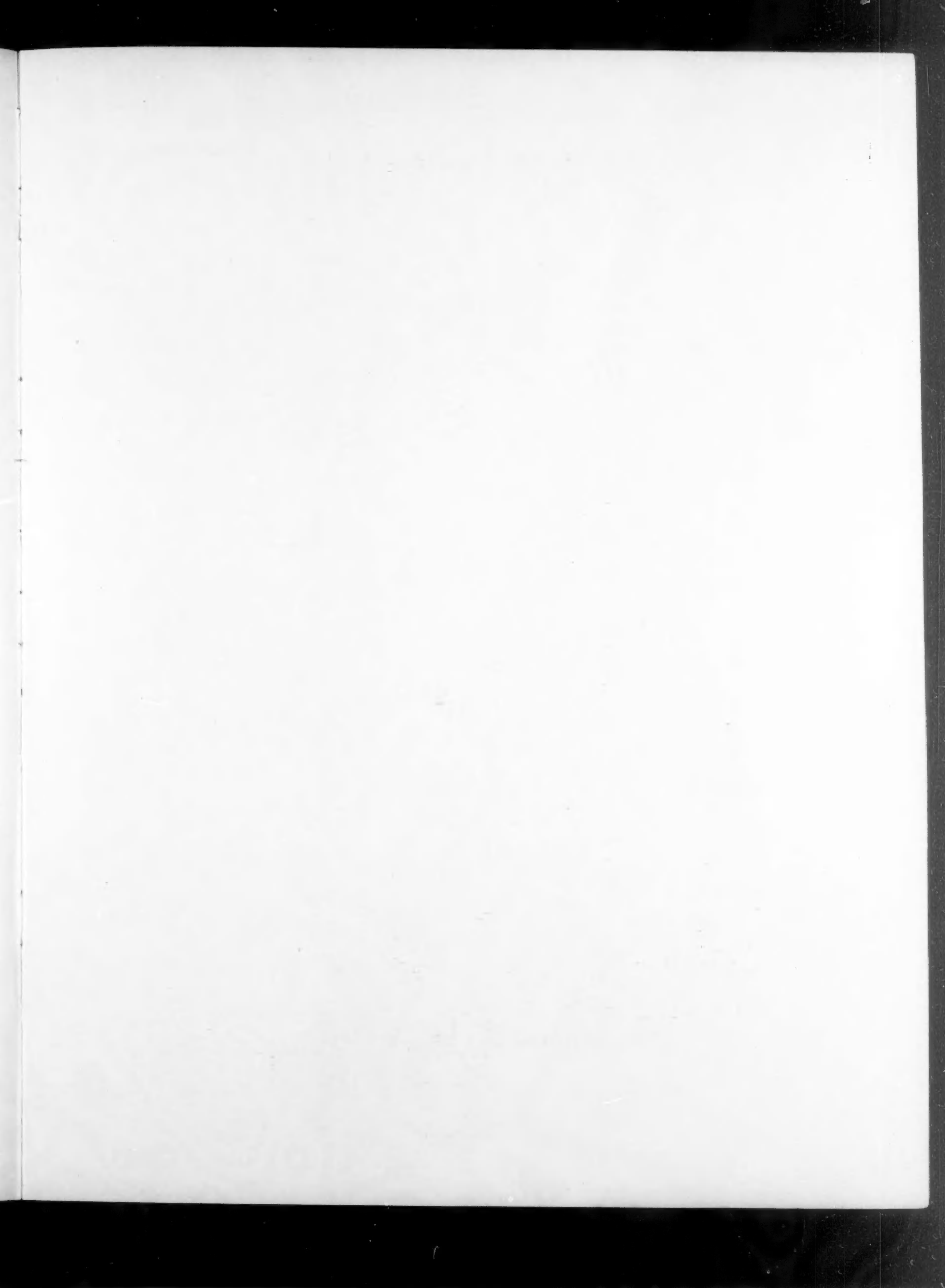


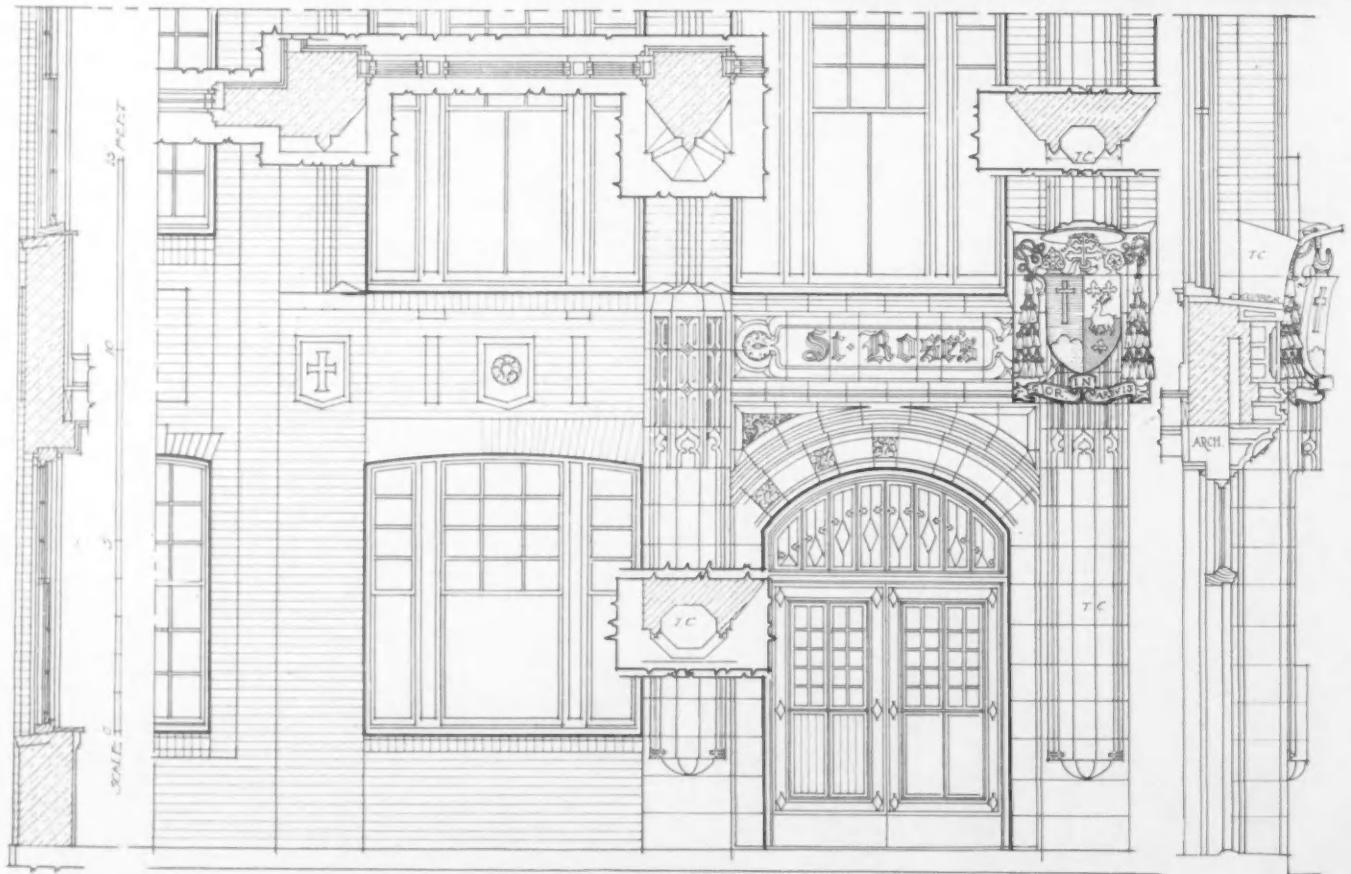
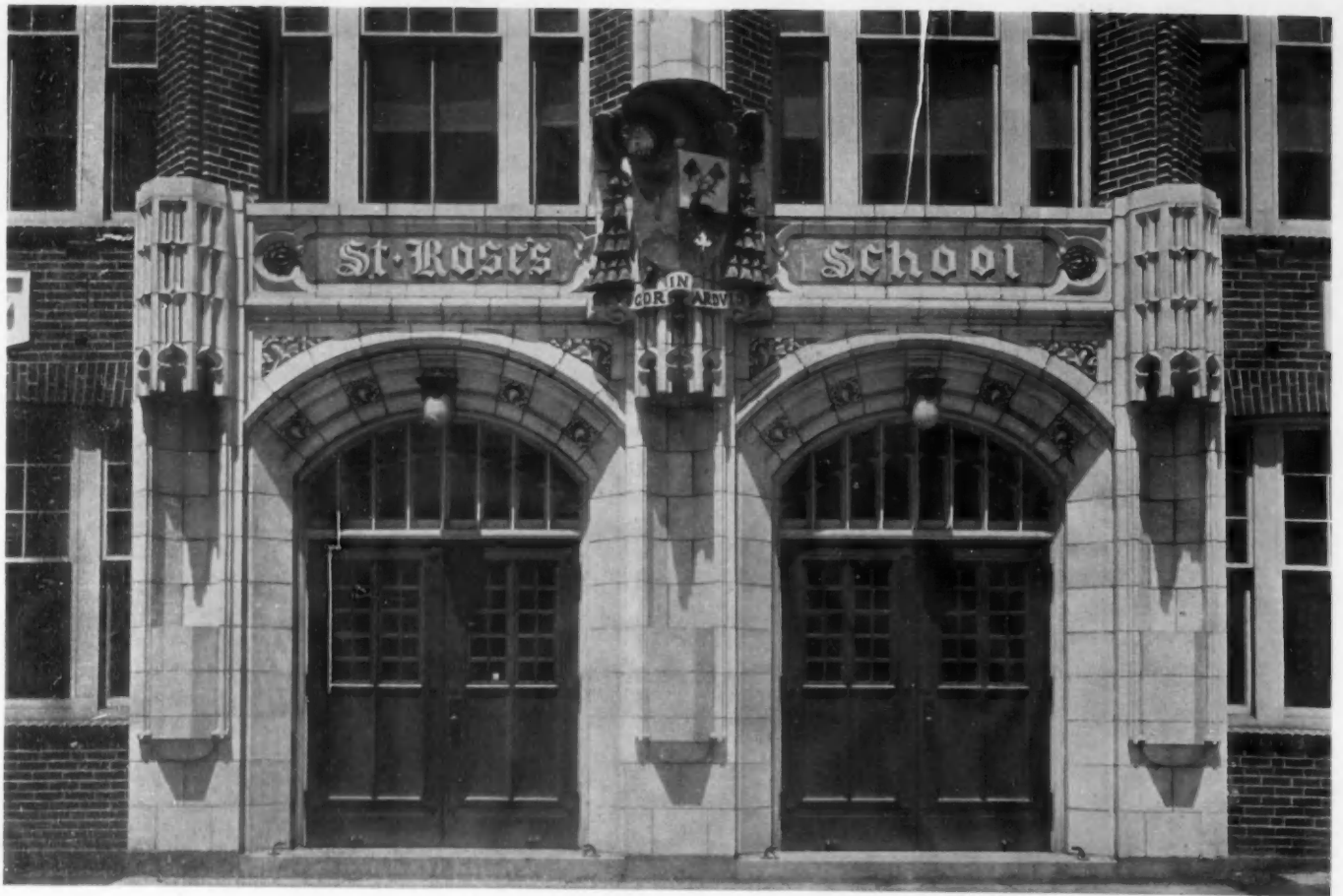
MATTHEW SULLIVAN,  
ARCHITECT.



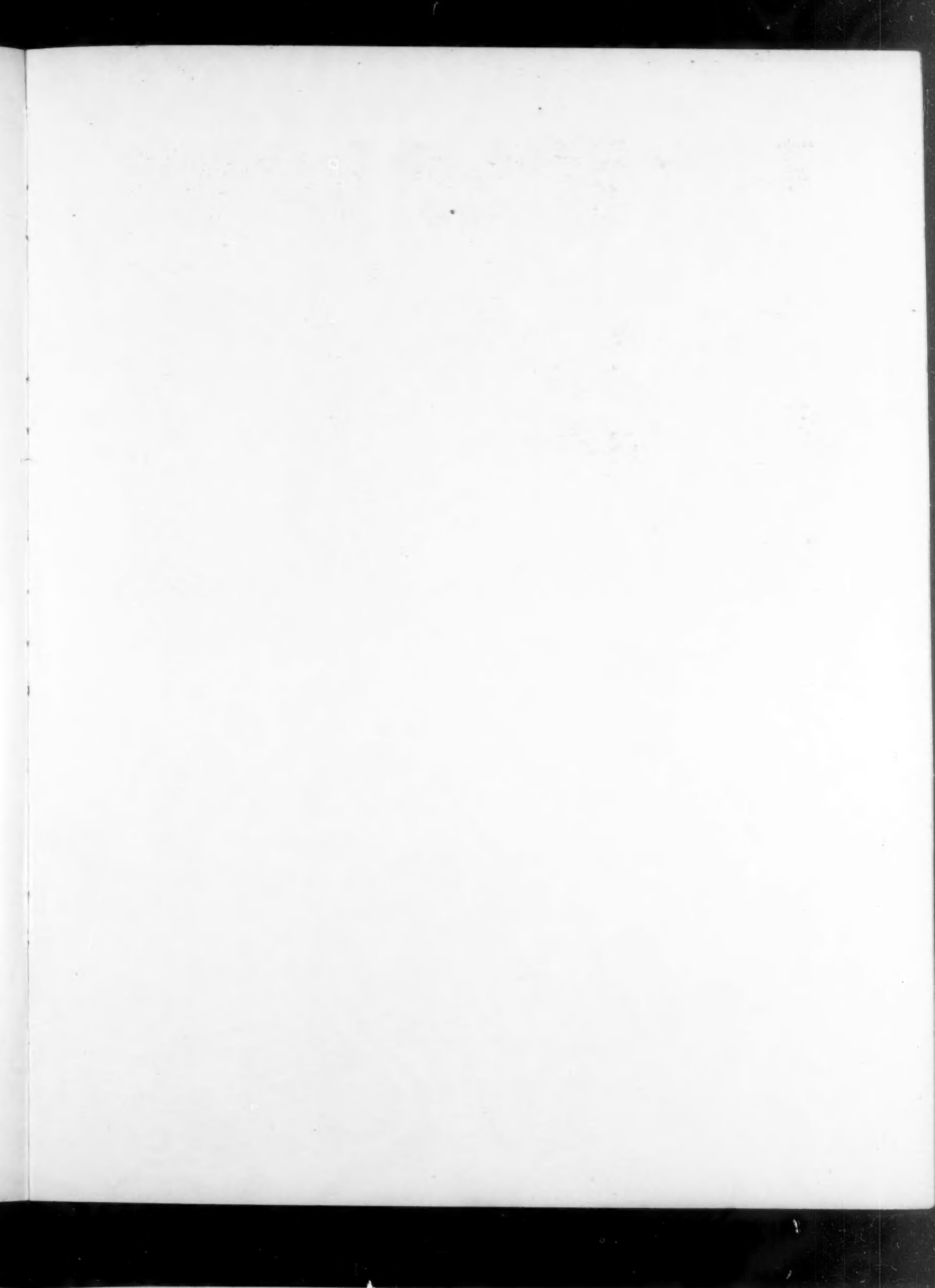
ST. ROSE'S  
SCHOOL,  
CHELSEA,  
MASS.

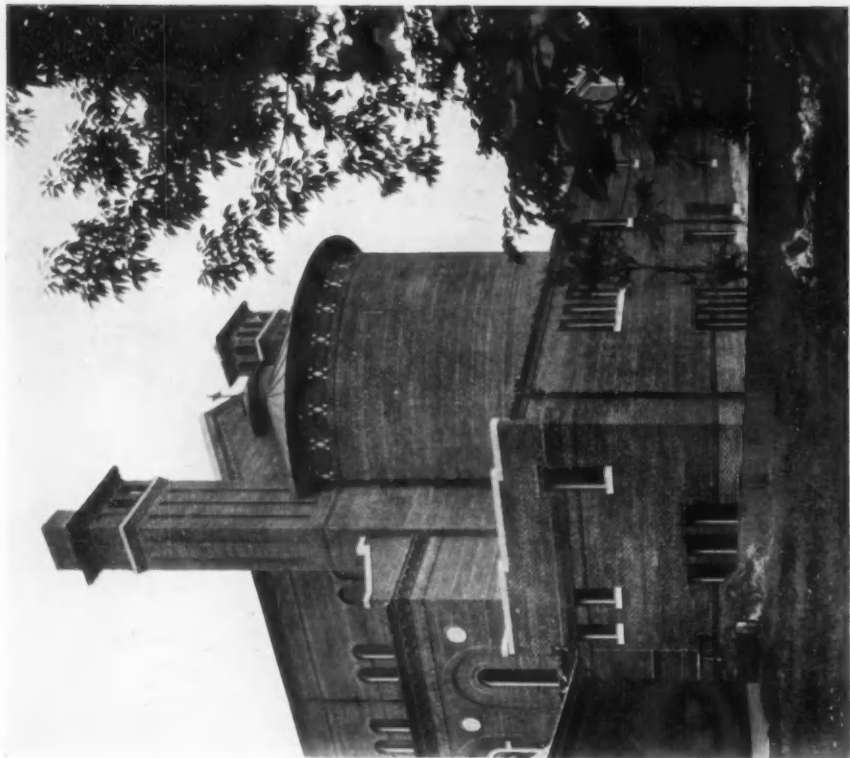






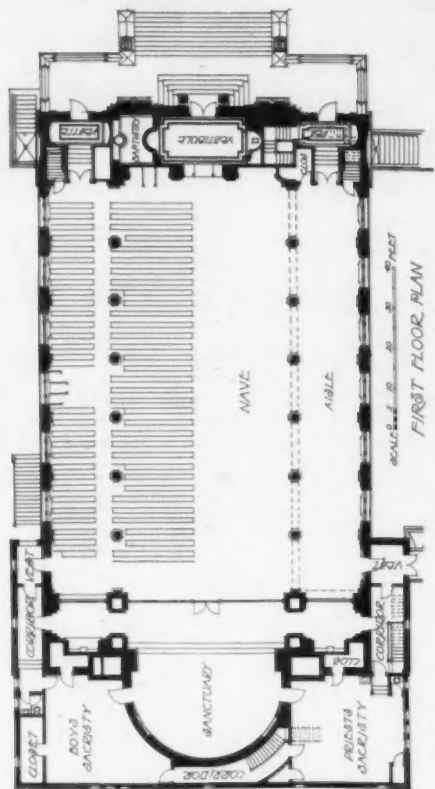
DETAILS OF MAIN ENTRANCE.  
ST. ROSE'S SCHOOL, CHELSEA, MASS.  
MATTHEW SULLIVAN, ARCHITECT.

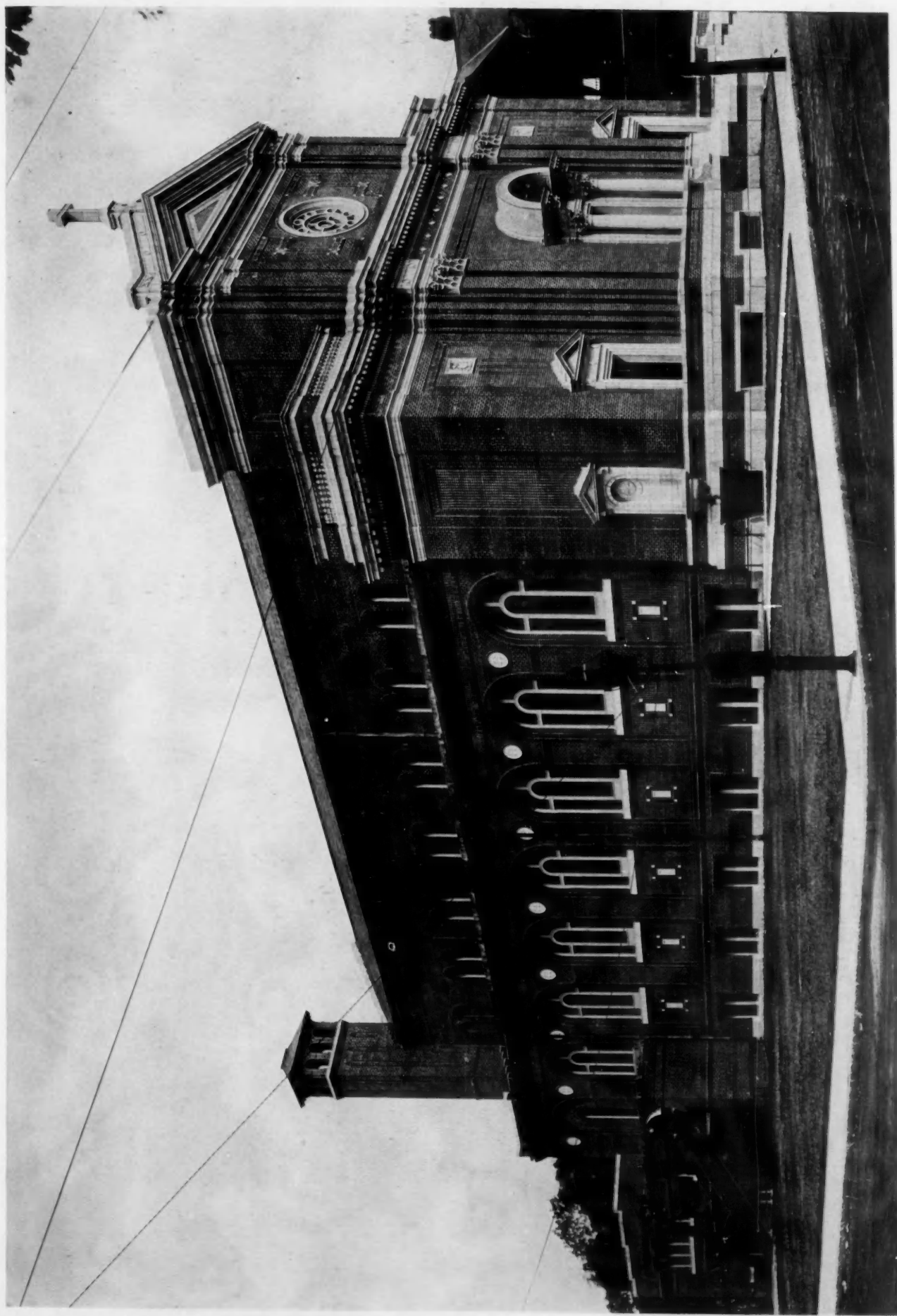




REAR VIEW.

CHURCH FOR ST. PATRICK'S PARISH, BROCKTON, MASS.  
CHARLES R. GRECO, ARCHITECT.





CHURCH FOR ST. PATRICK'S PARISH, BROCKTON, MASS.  
CHARLES R. GRECO ARCHITECT.





GENERAL VIEW OF INTERIOR.



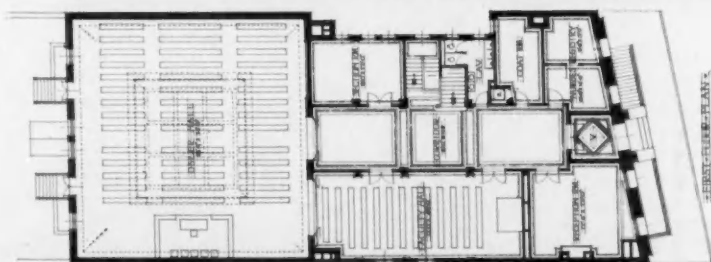
DETAIL OF MAIN ENTRANCE.



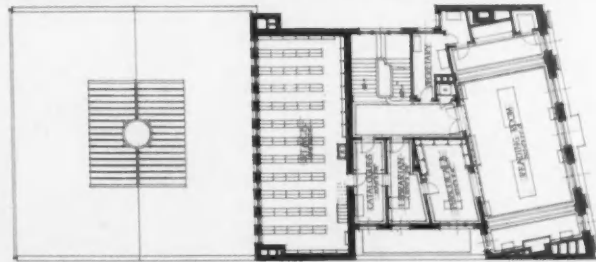
DETAIL OF NICHE IN WALL.

CHURCH FOR ST. PATRICK'S PARISH, BROCKTON, MASS.  
CHARLES R. GRECO, ARCHITECT.





FIRST FLOOR.



SECOND FLOOR.

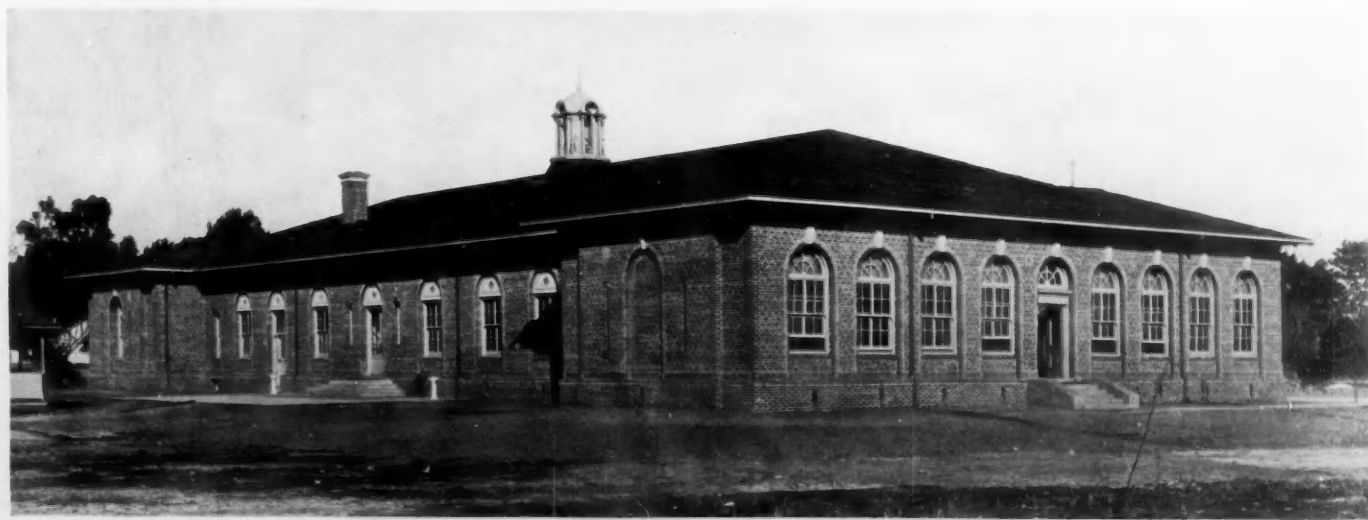
MEDICAL AND CHIRURGICAL BUILDING, BALTIMORE, MD.  
ELLICOTT & EMMART, ARCHITECTS.



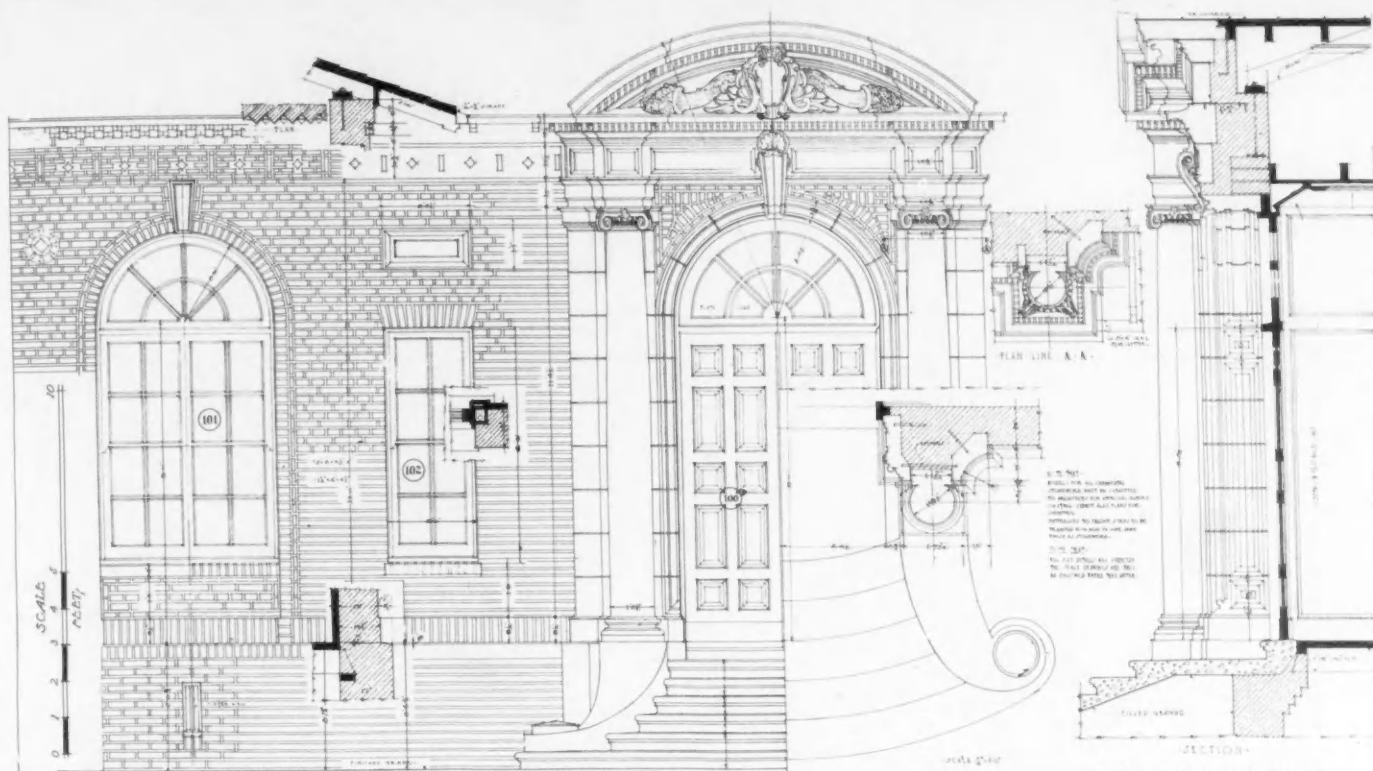


✓  
GRAMMAR SCHOOL  
AT  
ARTESIA,  
CALIFORNIA.

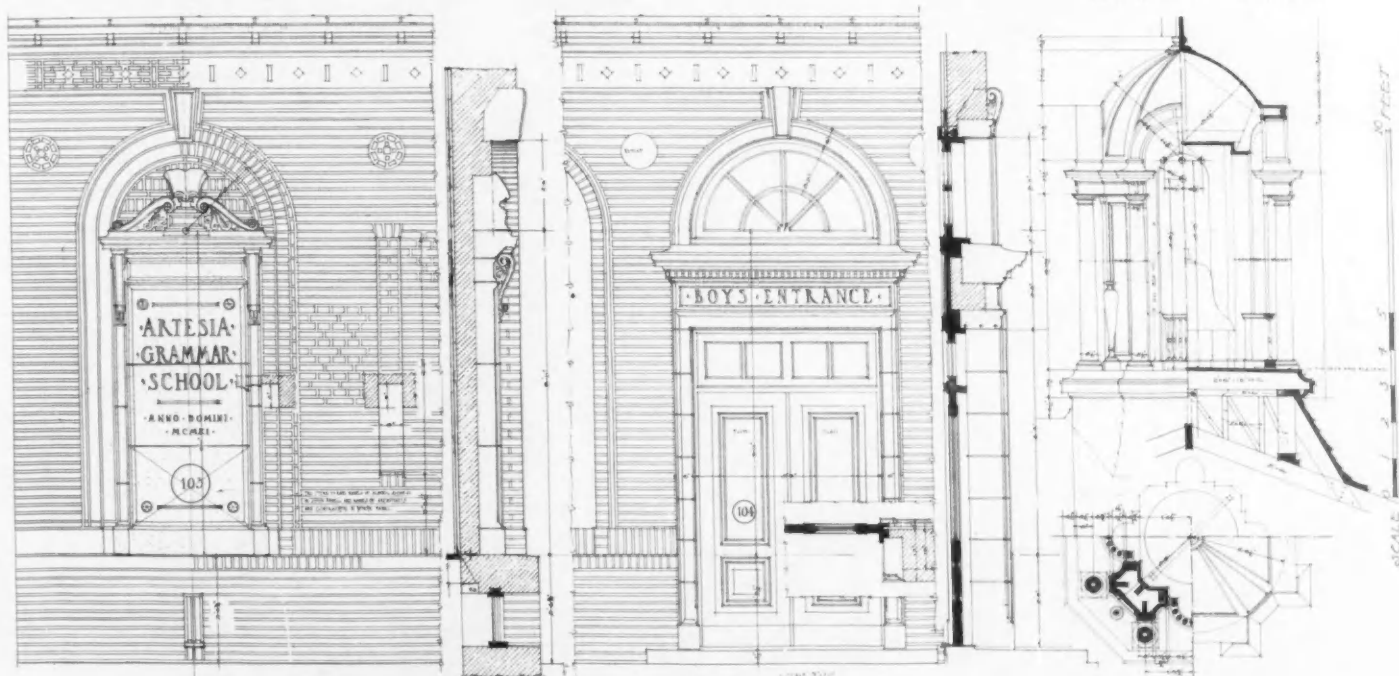
WITHEY & DAVIS,  
ARCHITECTS.





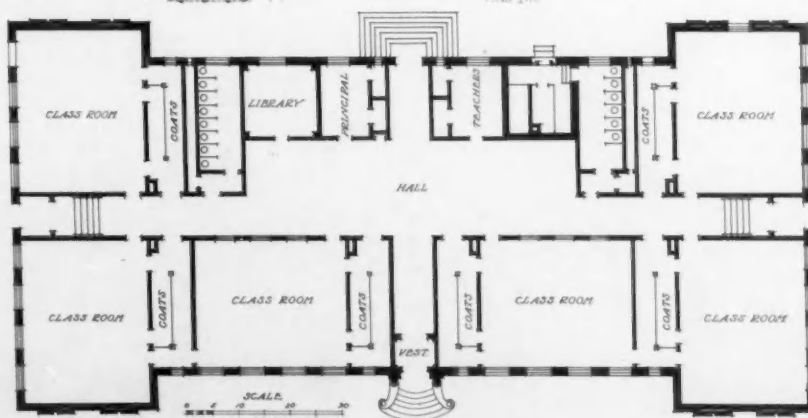


DETAILS OF MAIN ENTRANCE.



DETAILS OF NICHE, ENTRANCE AND BELFRY.

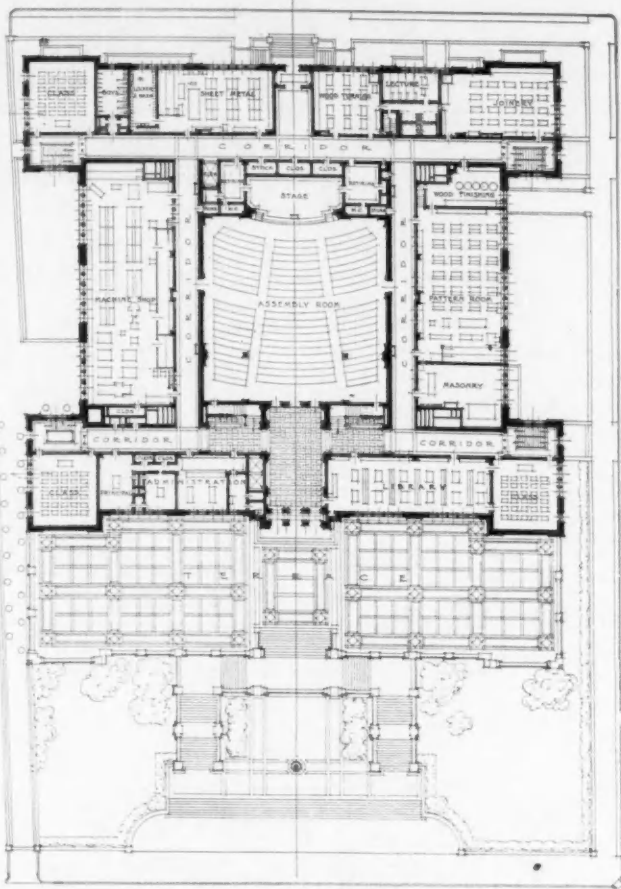
EXTERIOR DETAILS AND PLAN.  
GRAMMAR SCHOOL  
AT  
ARTESIA, CAL.



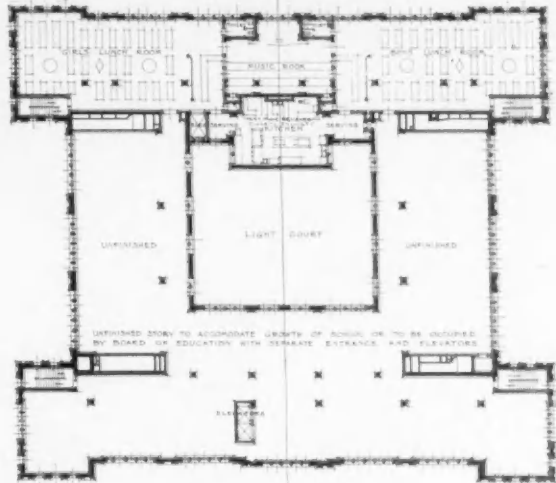
MAIN FLOOR PLAN

WITHEY & DAVIS,  
ARCHITECTS.





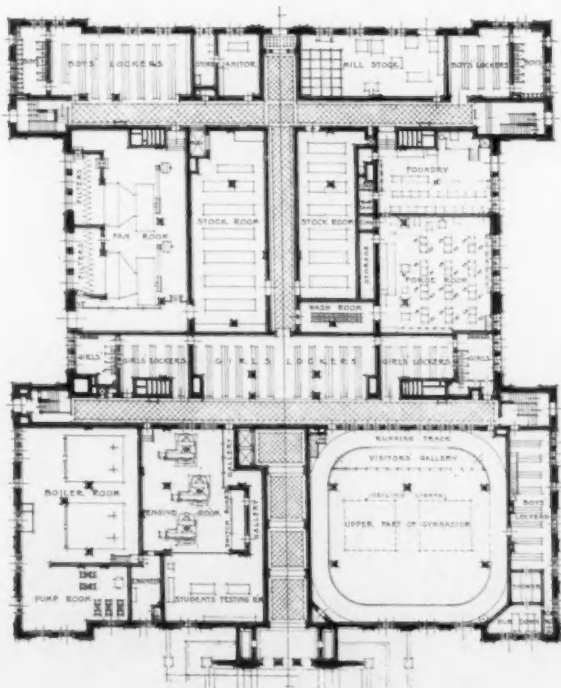
FIRST FLOOR PLAN.



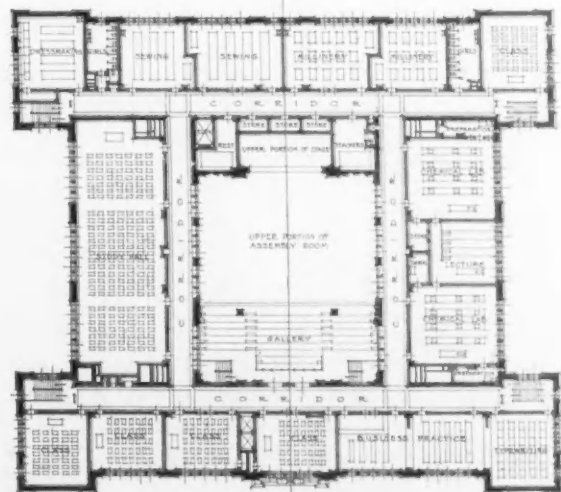
FOURTH FLOOR PLAN.



THIRD FLOOR PLAN.



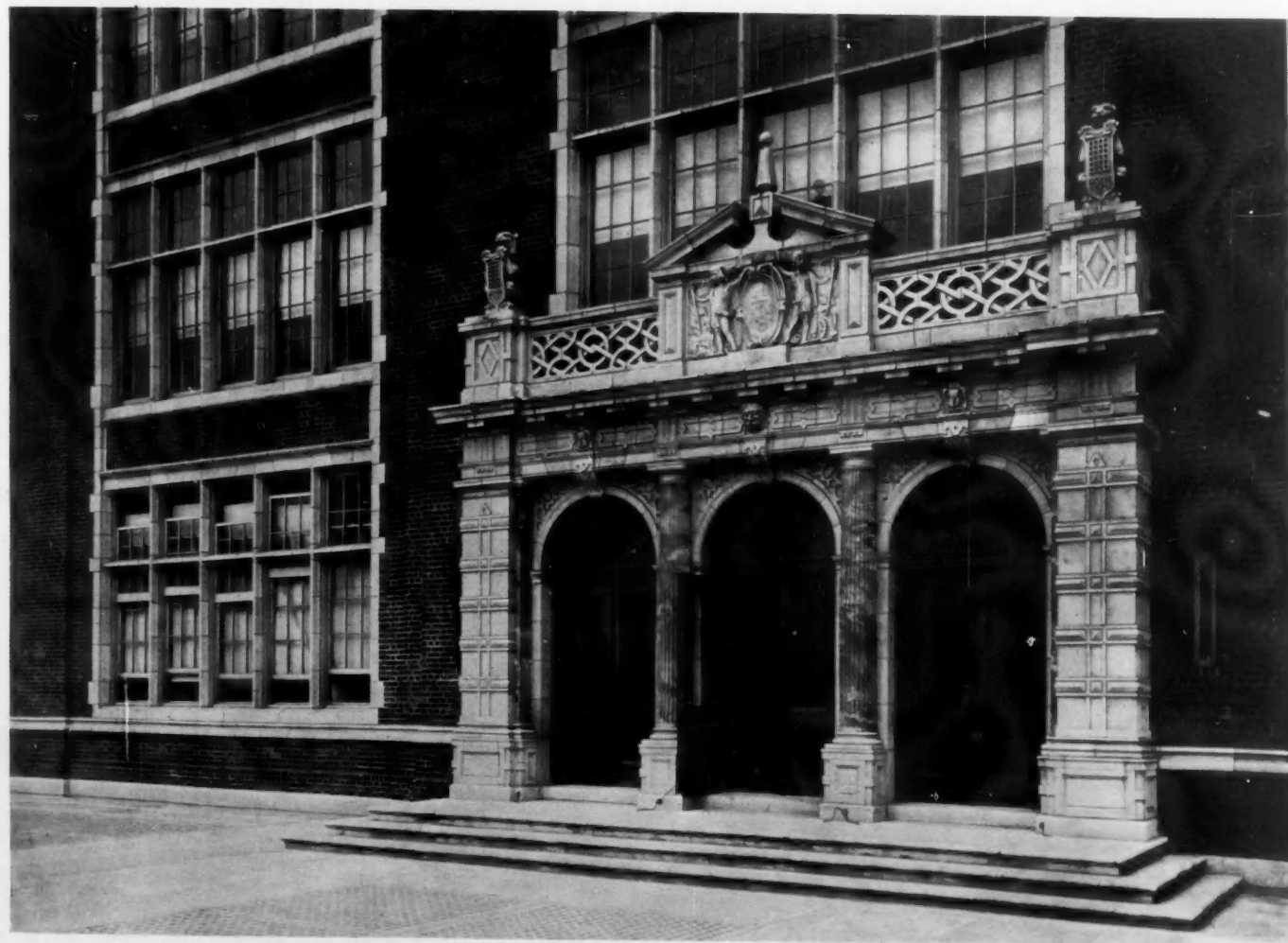
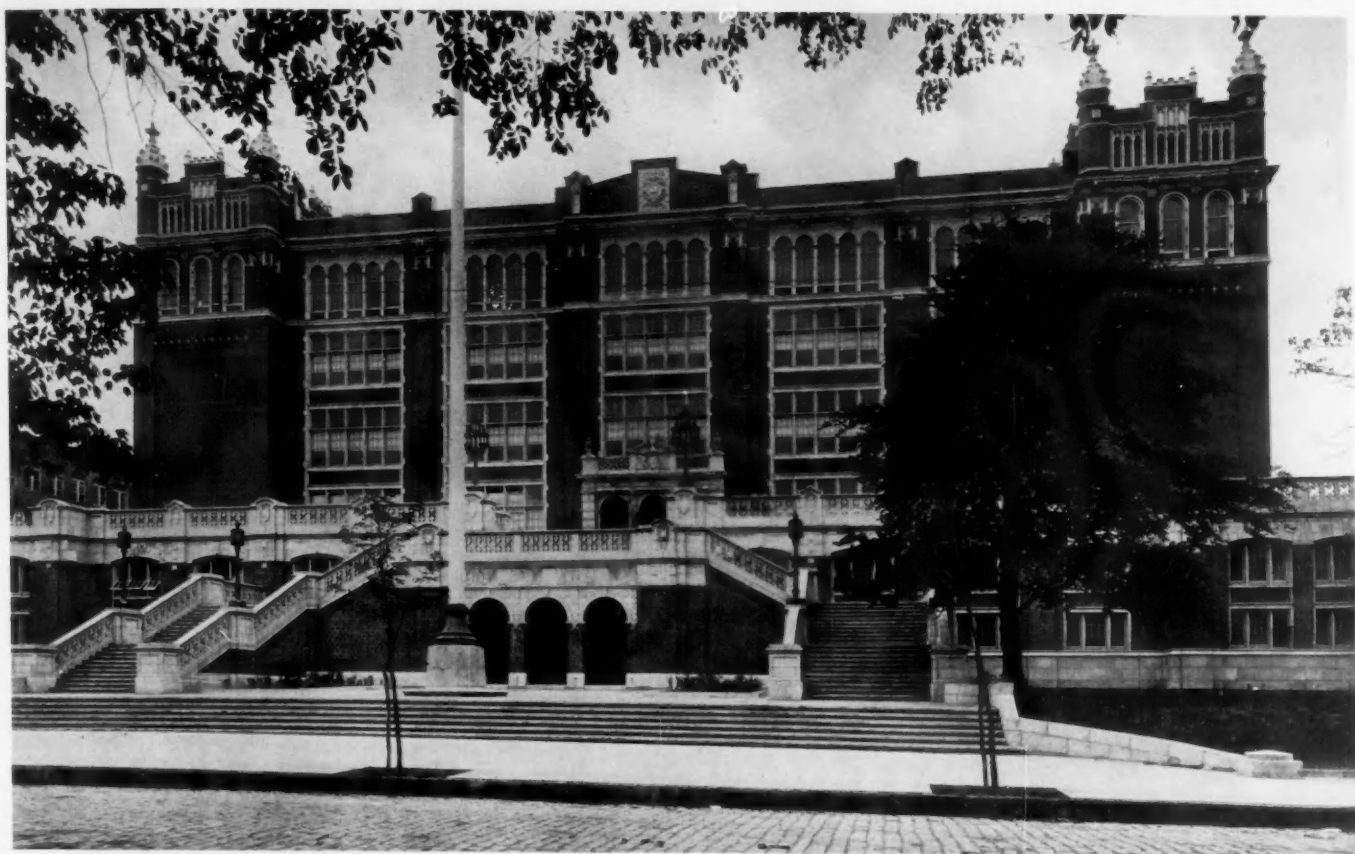
BASEMENT PLAN.



SECOND FLOOR PLAN.

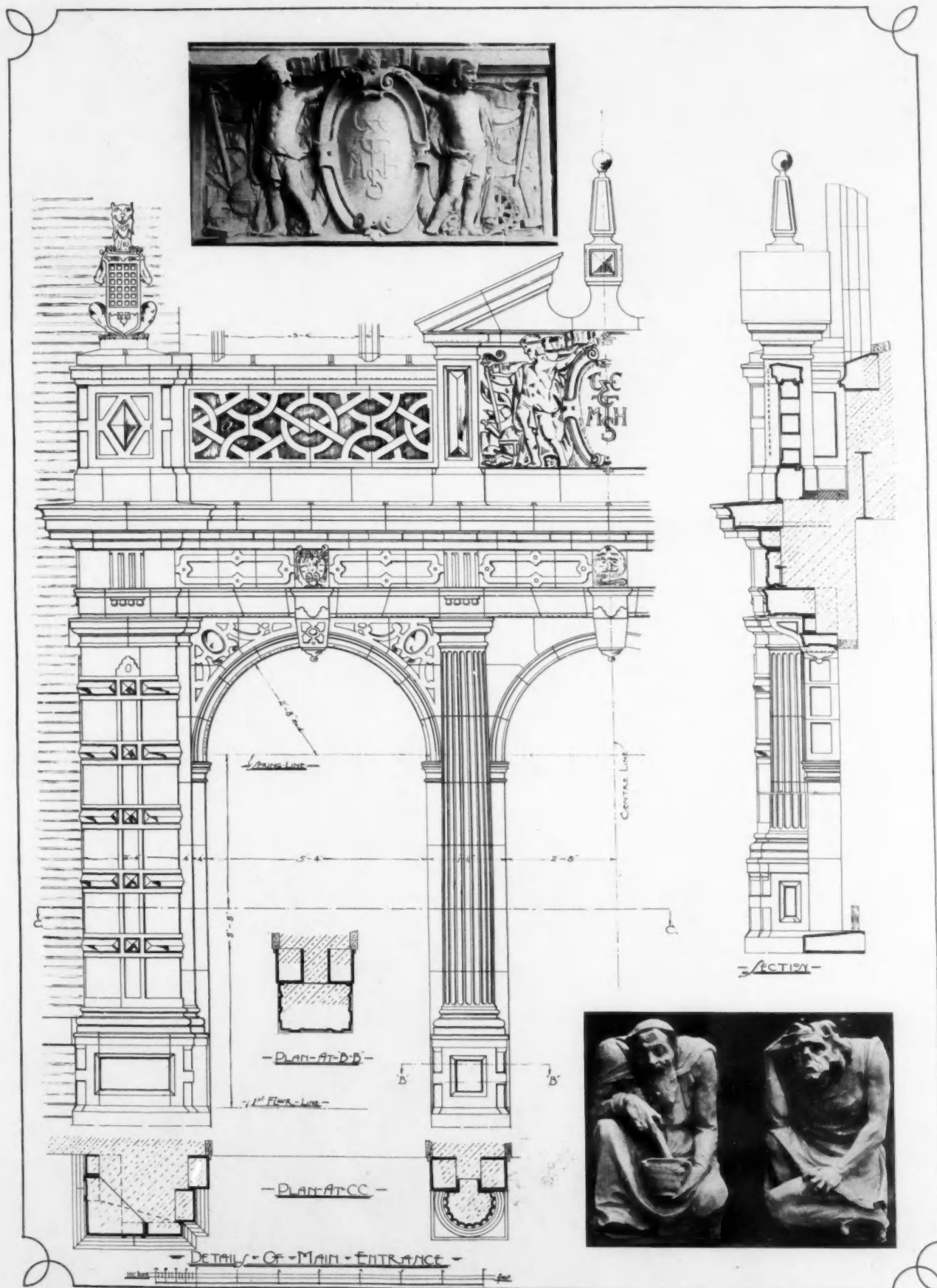
COMMERCIAL AND MANUAL TRAINING HIGH SCHOOL, NEWARK, N. J.  
E. F. GUILBERT, ARCHITECT.





COMMERCIAL AND MANUAL TRAINING HIGH SCHOOL, NEWARK, N. J.  
E. F. GUILBERT, ARCHITECT.





Terra Cotta Details.

E. F. Guilbert, Architect.

COMMERCIAL AND MANUAL TRAINING HIGH SCHOOL, NEWARK, N. J.



ARC DE TRIOMPHE,  
NANCY, FRANCE.



ARC DU CARROUSEL,  
PARIS, FRANCE.

## Commemorative Monuments. — VII.

(Concluded.)

H. VAN BUREN MAGONIGLE.

ONE of the most imposing forms men have used in successive periods to commemorate their own greatness or that of others is the triumphal arch. Arches fall naturally into two groups: those of a single span and those having three openings in the mass, the central one for vehicles and the side arches for pedestrians. In Roman times they were erected usually to record triumphal entries. The Arch of Constantine in Rome is of the triple type; the workmanship, as might be expected at so late a date, is poor, but much of the sculpture is believed to have been filched from some other gentleman's arch demolished or defaced to provide the first Christian emperor with better sculpture than his times or his purse afforded.

We find a more modern example with a different treatment in the Stanislas Gate at Nancy and another of the triple type in the Arc de Triomphe in the same city.

Another, and one of the most beautiful of its class, is that known as the Arc du Carrousel in Paris. Designed by Percier and Fontaine, it is beautiful in proportion and jewel-like detail. It is one of the accents that diversify the vista from the Louvre to the Arc de Triomphe.

At Marseilles is a variant of the type, partaking in its decoration of the usual character

of triple arches, and in mass that of arches of a single span; (unfortunately we were unable to secure a photograph for reproduction;) of the latter the best known prototype of modern triumphal arches is the Arch of Titus in Rome; the arch itself is an incident of the whole mass; the piers at each side form a satisfactory abutment; the main cornice is comparatively small and the attic is of sufficient height and mass to give the arch something to do.

It is interesting to compare the Washington Arch in New York City with it; here the arch is of prime importance, and the abutments are insufficient to satisfy the eye; the main cornice is out of scale and the attic is reduced to bring it into proportion with the piers.

The faults of the Soldiers' and Sailors' Memorial Arch in Brooklyn are so apparent that it is unnecessary to comment upon them. Of all the arches of the

world the Arc de Triomphe in Paris seems to me to bear the palm. The stupendous mass, the restraint and dignity of it, and above all its proportions, appear to me to place it in a class apart. It is wonderfully placed, too, just at the crown of the hill, up which the grade of the Champs Elysées sweeps in a concave line and disappears at sunset in a luminous haze.



ARCH OF CONSTANTINE, ROME.



WASHINGTON ARCH, NEW YORK, N. Y.



ARCH OF TITUS, ROME, ITALY.



PORTE STANISLAS, NANCY, FRANCE.  
COMMEMORATIVE MONUMENTS.



SOLDIERS' AND SAILORS' MEMORIAL ARCH, BROOKLYN, N. Y.



ARC DE TRIOMPHE, PARIS, FRANCE.  
COMMEMORATIVE MONUMENTS.

## Competition for a Hollow Tile Bungalow.

### REPORT OF THE JURY OF AWARD.

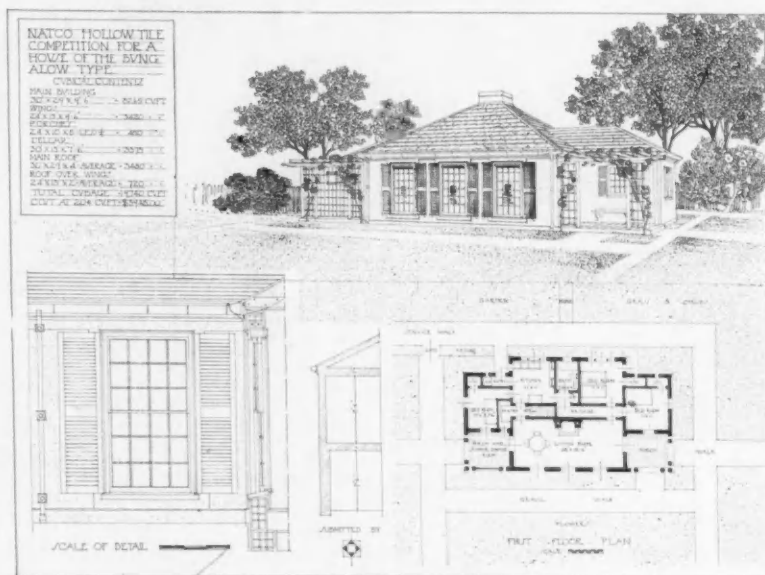
THE jury selected to award the prizes in THE BRICK-BUILDER Competition for a small house of the bungalow type to be built of Natco Hollow Tile, at a cost not exceeding \$4,000, have examined the two hundred and sixty-seven designs submitted and begs to report as follows:

The competition as a whole is marked by excellent draftsmanship and a general high standard of rendering, as well as intelligence on the part of most of the competitors as to the style which best meets the conditions. The plans were not as well designed as the exteriors, and the committee felt that while most of the competitors complied with the literal terms of the program as regards cubic contents and cost, a number of the houses were far in excess of what could actually be built for the amount named in the program, and of two designs of equal merit the more compact one was given the preference. It may be of interest also to note the fact that while the members of the jury came from different parts of the country they unanimously agreed on the selections for the four prizes and six mentions. The jury wishes also

to state that in making the selections they regarded primarily the quality of the design in its suitability to terra cotta block construction, and in selecting the

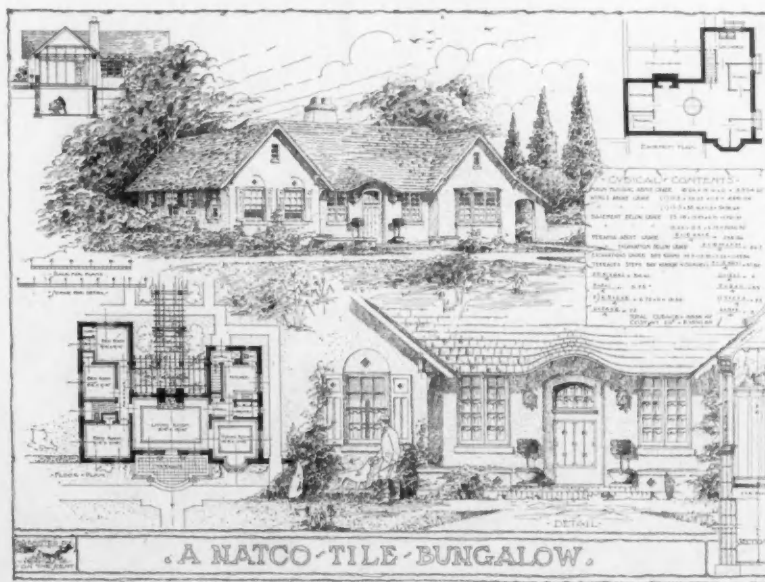
prize winners and the mentioned drawings there was a consensus of opinion that all unusual or outré designs were less desirable than the more or less standardized types. The jury was agreed that plain wall surfaces with all ornament flat, cornices of slight projection, and types of roofs which included no pockets liable to damage the walls, were essentials to good design; therefore the competition was decided on the mass of the building and composition of the façades rather than on the use of extraneous detail. That this factor in determining the judgment did not unduly narrow the field from which the competitors drew their inspiration is evidenced by the fact that the first three designs are drawn from quite different prototypes; the first being rather Italian in character, while the second is English, and third a gambrel roofed Colonial house.

The first prize design is charming in mass, very simply designed and rendered, but filled with the good taste so




MENTION DESIGN.

Submitted by William E. Voss, Boston, Mass.



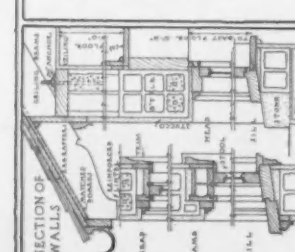
MENTION DESIGN.

Submitted by Elbert J. Richmond, New Haven, Conn.

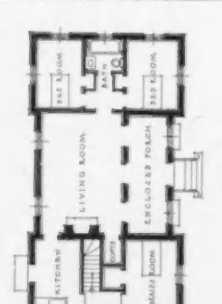


DRAWN BY NIGHT  
1916.

**SECTION OF WALLS**



**PLAN**



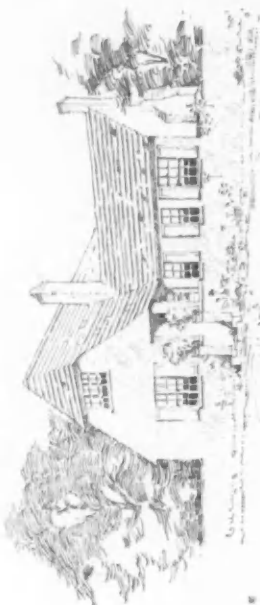
P. L. A. N.  
SCALE  
1" = 10'

**THE CVBAGE**

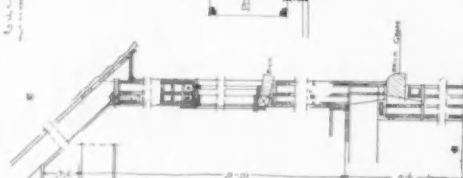
FOURTH 14-20-25-27-31-34 = 527.76  
FIFTH 14-20-25-27-31-34 = 527.76  
LIVING 14-20-25-27-31-34 = 527.76  
TOTAL COST 3.36 CUBIC FEET = 527.76  
TOTAL COST 3.36 CUBIC FEET = 527.76

**ITEMS OF COST**

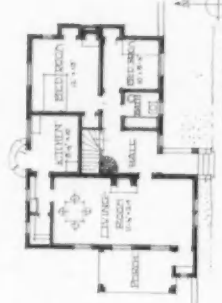
EXCAVATING	4.40
FOUNDATIONS	1.00
BRICKWORK	1.00
PLASTERING	1.00
LUMBER & CARPENTRY	1.00
PAINTING	1.00
ELECTRIC WIRING	1.00
FLUVENT	1.00
MISCELLANEOUS	1.00
<b>TOTAL COST</b>	<b>4000 DOLLARS</b>



**SECTION OF WALLS**



**PLAN**



P. L. A. N.  
SCALE  
1" = 10'

**THE CVBAGE**

FOURTH 14-20-25-27-31-34 = 527.76  
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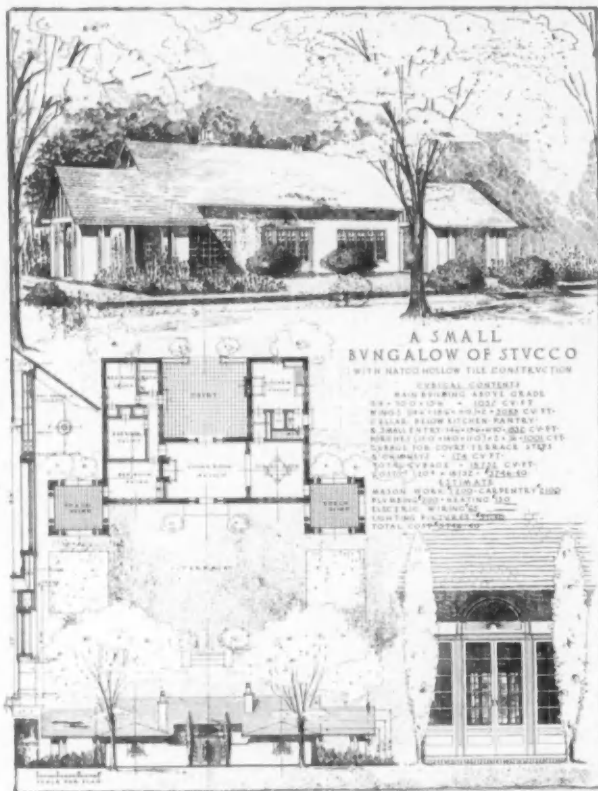
**THE BRICKBUILDER COMPETITION FOR A HOLLOW TILE BUNGALOW.**

Submitted by William Boyd, Jr., Pittsburgh, Pa.

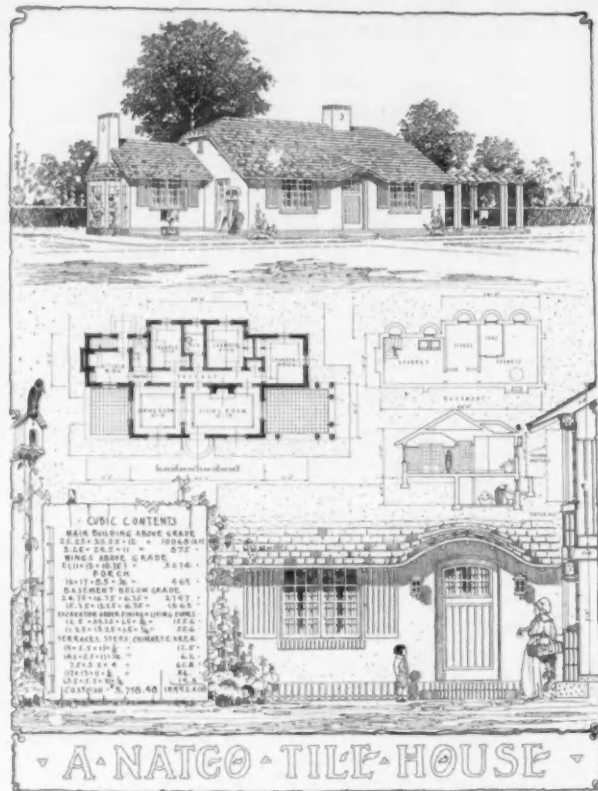
**THE BRICKBUILDER COMPETITION FOR A HOLLOW TILE BUNGALOW.**

Submitted by C. A. Nilson, Boston, Mass.

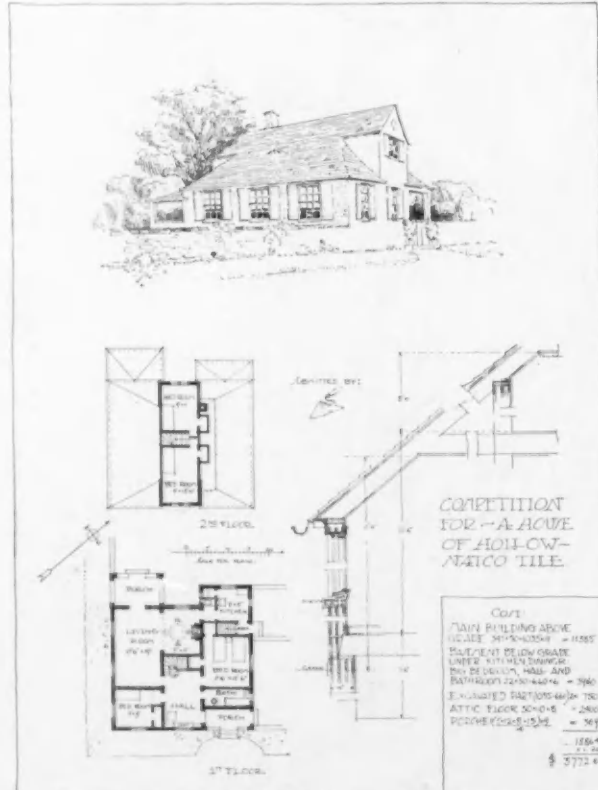
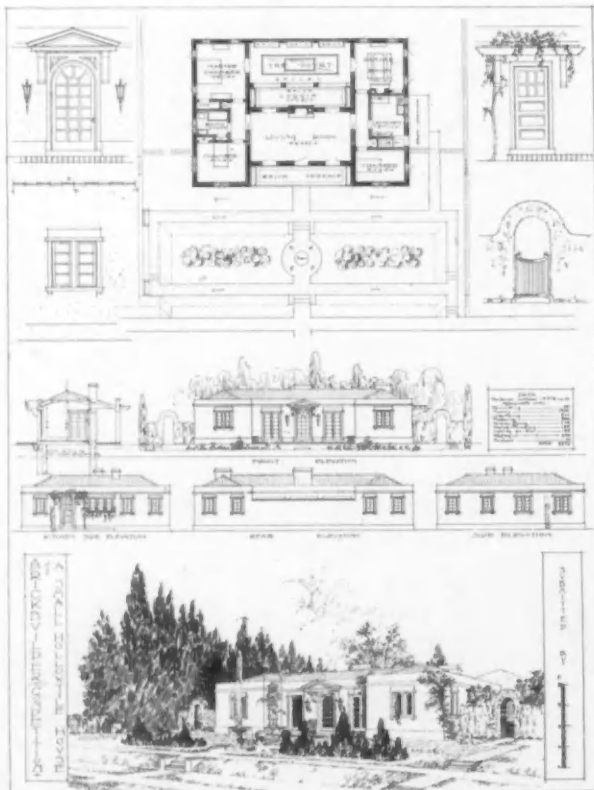




MENTION DESIGN.  
Submitted by Herman Brookman, Brooklyn, N. Y.



MENTION DESIGN.  
Submitted by Jack Lehti, Washington, D. C.



THE BRICKBUILDER COMPETITION FOR A HOLLOW TILE BUNGALOW.

essential in successful country house work. The plan is in detail susceptible of considerable improvement, although its motive is sufficiently excellent. That the author of this design was really endeavoring to produce a \$4,000 house is evidenced by the fact that he has made one chimney serve the entire building, although two chimneys would perhaps have improved the livability of the building and would not have added to the cubic contents.

The second prize design is better planned than the first and is rendered simply and very well. This English type of building seems excellently adjusted to the construction, and it was somewhat surprising to the jury to find that there were not more of this type of architecture submitted.

The third prize design, like the first and second, is compactly planned and the exterior treated in a manner sufficiently interesting so that there is no square or box-like character to the structure. Certain features of the exterior of this design might perhaps have been better handled: notably the kitchen extension with its flat roof, and the porch on which the columns are a little large for their type. The perspective has been made from a rather unfortunate viewpoint, and the rendering is weaker than a number of others submitted, but in spite of these minor defects the building is very good indeed and fully worthy of its place.

The fourth prize is an American variation of well known English cottage motives, with a pergola instead of a piazza: the columns used in this pergola are somewhat too large in the opinion of the jury, but the design otherwise is most agreeable. The jury also felt that while the plan of this house is in motive good, the corridor could have been abbreviated with advantage.

The six drawings to which mentions were given the jury felt to be quite the best aside from the prize drawings. But while each of them had strong points, each also had weak points which made it practically impossible to place the six designs in order, especially as the jury found much diversity of opinion among its members as to the ranking of these drawings.

The jury wishes to congratulate practically everyone who competed in this contest for the careful manner in which his drawing was made, and the general high order of skill and intelligence displayed.

ALPHEUS W. CHITTENDEN, Detroit.

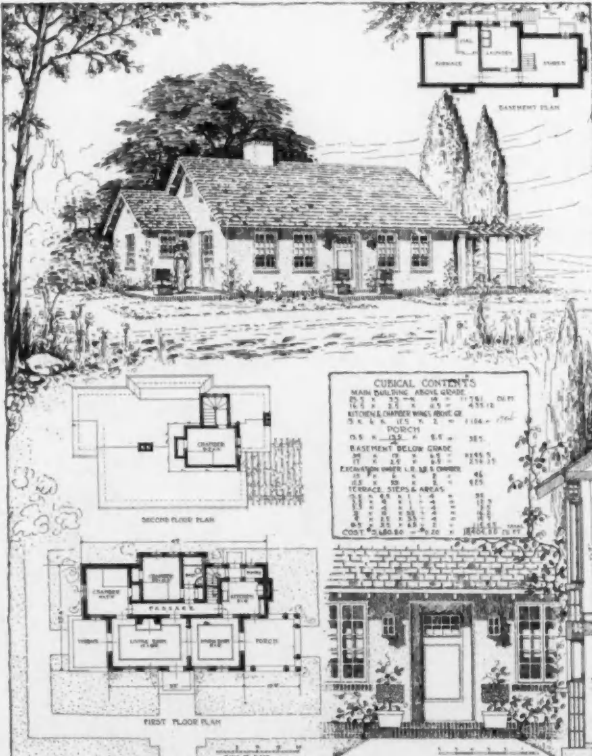
AYMAR EMBURY II, New York.

HUGH M. G. GARDEN, Chicago.

GEORGE HUNT INGRAHAM, Boston.

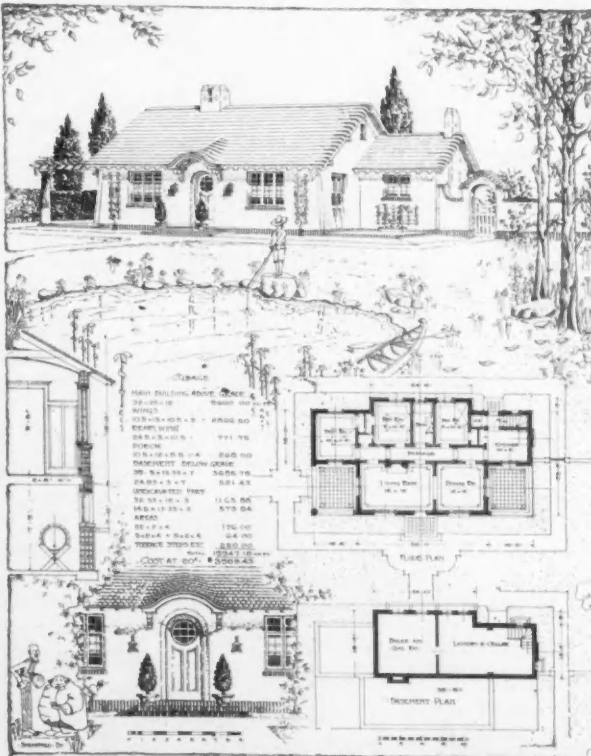
FRANK B. MEADE, Cleveland.

*Jury of Award.*



**A SMALL HOUSE OF NATCO HOLLOW TILE**

DESIGN SUBMITTED BY FREDERICK SCHOLER,  
CHICAGO, ILL.



**COMPETITION FOR A SMALL TILE HOUSE**

DESIGN SUBMITTED BY FRANK HAUSHKA,  
CLEVELAND, OHIO.

**THE BRICKBUILDER COMPETITION FOR A HOLLOW TILE BUNGALOW.**

## Editorial Comment and Miscellany.

## REPEAL OF THE TARSNEY ACT.

THE action of the House of Representatives, in passing an amendment to repeal the Tarsney act, has been justly condemned by the public and architectural press, the American Institute of Architects, and by the most prominent members of Congress, and many in the world of art. Secretary of the Treasury, Franklin MacVeagh, in writing to the Committee on Public Buildings and Grounds in regard to the repeal, said: "I feel most strongly that to make it impossible for the Government to secure the services of the best architectural ability the country affords would be most detrimental to the advancement of Government architecture."



DETAIL FOR THEATER  
BY  
CONKLING-ARMSTRONG  
TERRA COTTA CO.  
Brown & Von Beren,  
Architects.

The question of comparative cost for making plans and specifications in the Supervising Architect's office and in the various private offices has caused the greatest contention. In a statement from the Secretary of the Treasury, August 6, 1912, the average cost during the fiscal years 1905 to 1911 inclusive, for preparing drawings and specifications in the office of the Supervising Architect, was 6.02 per cent. Such a statement should go far to remove the bone of contention since the customary com-

mission paid to the private architect is 6 per cent.

The Senate has stricken out the House provision and the matter has gone into conference. It is to be hoped that the great advance in the architecture of public buildings since the passage of the Tarsney act, together with the pressure brought to bear by all men and organizations interested in the artistic development of our country, will prevent the repeal of this amendment.



DETAIL BY NEW YORK ARCHITECTURAL TERRA COTTA  
COMPANY.  
Gaetan Ajello, Architect.

## PLATE ILLUSTRATIONS—DESCRIPTION.

ST. ROSE'S PAROCHIAL SCHOOL, CHELSEA, MASS. PLATES 103, 104. The exterior is of red brick and white mat glazed terra cotta with seals in colored terra cotta. Upon the interior the walls are of natural gray color, the woodwork of oak. The assembly hall, 60 by 81 feet, has a gallery on three sides and seats approximately 1,400. The cost of the building was \$85,000.



DETAIL EXECUTED BY O. W. KETCHAM  
TERRA COTTA WORKS.

GRAMMAR SCHOOL AT ARTESIA, CAL. PLATES 109, 110. The exterior is of a wire cut red brick varying in shade and laid with a flash joint of coarse sand mortar. The trimmings at the entrance, etc., are of a warm cream color matching the mortar joints. The interior is trimmed throughout with Oregon pine. The furnace room is placed above the ground and the plenum system of heating installed. The building cost \$20,000, or 8.6 cents per cubic foot.

MEDICAL AND CHIRURGICAL BUILDING, BALTIMORE, MD. PLATE

108. The exterior is of rough textured red brick, with terra cotta trimmings. In planning, a departure has been made from the usual brilliantly lighted book stack, with windows for each aisle, to small, fixed win-



DETAIL BY NORTHWESTERN TERRA COTTA  
COMPANY.  
Andry & Bendernagel, Architects.

dows. The total book capacity is approximately 60,000 volumes. The basement provides for a banquet room, the usual heating cellar, two large rooms for extra book storage, and space for the receipt and shipment of books.

The third floor is given over to a laboratory and several rooms for special purposes in connection with various branches of medical research. An apartment is provided for the librarian, which consists of a living room, dining room, kitchen, two bedrooms and bath, in addition to a servant's room and bath. The total cost of building was \$64,342.49, with a total cubage of 572,090 cubic feet, making the cost per cubic foot .112 cents.

CHURCH FOR ST. PATRICK'S PARISH, BROCKTON, MASS. PLATES 105-107. The exterior is of wine colored brick with wide white joints and cream terra cotta. Upon the interior the decorations are of a soft white. The baldachin, pulpit, and side altars are of dark fumed oak, the main altar of Vermont marble.

#### PAGE ILLUSTRATIONS— DESCRIPTION.

CONEY ISLAND HOSPITAL, BROOKLYN, N. Y. PAGE 210. The hospital located one-half mile from Coney Island contains 22 acres of land and consists of six buildings so disposed as to permit of a considerable extension by additional ward buildings. All buildings are finished in a light cream colored face brick, limestone trimmings, copper cornices, and red tile roofs. The main building accommodates ninety-six patients, — eighty in four wards of twenty beds



INTERIOR, THIRD NATIONAL BANK, ATLANTA, GA.  
Entirely of gray terra cotta, executed by Atlantic Terra Cotta Company.  
Morgan & Dillon, A. Ten Eyck Brown and W. T. Downing, Associated, Architects.

each, and sixteen in eight smaller wards of two beds each. Upon the interior the floors are of terrazzo and mosaic with a sanitary coved base, excepting those of vitrified tile found in the toilets, bath rooms, closets, operating rooms, etc., which rooms are also fitted with wainscots of 6 by 6 inch glazed tile. All woodwork is enameled white and walls painted a soft green tint. On account of the proximity to the ocean, particular attention has been paid to all exposed metal work, hardware, and lighting fixtures. The fixtures are of brass, sand blasted, silverplated, and have three coats of enamel, each one baked on. A pilot light system has been installed for night work, which permits of half lighting. In heating, direct radiation is used excepting for the wards and isolation rooms, where the direct-indirect system is employed, while the exhaust fan system furnishes the ventilation. The buildings for nurses and employees are similar in design, the former accommodating twenty-seven nurses in separate rooms, while the latter provides for twenty-four with appropriate facilities for both men and women. The bedrooms and sitting rooms are of comb-grained yellow pine with trim of straight grained white oak, varnished. The ambulance house on the ground floor accommodates four ambulances, four stalls, carriage, wash, and harness room; while the upper floor provides a large dormitory for eighteen male help, a room for ambulance drivers, and separate bath rooms. The pathological building in addition to the usual laboratory, morgue, mortuary refrigerators, etc., has a small chapel with waiting room and an autopsy room with toilet and bath. The walls are tiled to the ceiling, carefully drained and ventilated; the door frames are of enameled iron, and the lighting fixtures of bronze metal. The front portion of the power house is



THEATER AT ST. LOUIS.  
Front of white enamel brick furnished by Hydraulic-Press Brick Company.  
Gustav P. Wuest, Architect.



GYMNASIUM, MORRISTOWN, N. J.  
Built of "Natco" Tile with plaster finish.  
Oscar Smith, Jr., Architect.

used for the general hospital laundry, the rear for the boiler room, etc. The total cost of the six buildings was \$343,000, making a cost per cubic foot of approximately 31.6 cents. This cost covers the buildings complete with the system of tunnels, a vacuum cleaning system, etc. By cubing the buildings from the bottom of the basement floor to top of roof slab in case of flat roofs, and one-half the slope of pitched roofs, the following cubical results were obtained: main building, 681,500 feet; nurses' building, 105,940 feet; employees' building, 81,400 feet; ambulance house, 60,550 feet; pathological building, 30,200 feet; power house and laundry, 124,650 feet.

BARNARD FREE SKIN AND CANCER HOSPITAL, ST. LOUIS, MO. PAGE 211. The main building is 125 feet long, faces south, and forms the type H in plan, with the working building connected to the central portion by means of a corridor. The main entrance opens through a glass vestibule, and all stairs are enclosed in metal and polished wire glass with sliding doors. The students' gallery is on the mezzanine floor over the sterilizing room, from which a view of the operations is obtained through a continuous screen of plate glass. The roof, used for a garden, is covered with promenade tile. Sanitary all-steel doors without joints, mouldings, or panels are used throughout; while the doors, metal furniture, telephone booths, etc., are finished in white enamel baked on. All floors, except in the basement and temporary construction, are of a jointless composition, and the walls are of hard plaster finished in colored enamel paint.

A direct system of steam heating has been installed. The electric fixtures are enameled, and in the wards reflectors are employed to throw the light toward the ceiling. In the main operating room double glass walls face the outside with radiator coils located between the glass. The building cost \$126,300, including architects' fee and exclusive of movable equipment. The cubical contents are 405,000 feet, reckoning from the top of the footings to the roof covering, making a cost of 31.2 cents per cubic foot.

#### TERRA COTTA FOR THE COMMERCIAL AND MANUAL TRAINING HIGH SCHOOL, NEWARK, N. J.

THE architectural terra cotta for the Commercial and Manual Training High School at Newark, N. J., E. F. Guilbert, architect, was furnished by the South Amboy Terra Cotta Company.

#### IN GENERAL.

Louis LaBeaume and Eugene S. Klein have formed a partnership for the practice of architecture under the firm name of LaBeaume & Klein, with offices at 1317 Chemical Building, St. Louis, Mo.

Wood, Donn & Deming announce that they have dissolved partnership in the practice of architecture and that Waddy B. Wood has opened offices at 816 Connecticut avenue,

Washington, D. C., while Edward W. Donn, Jr., and William I. Deming will continue practice under the



DETAIL FOR CIRCULAR BAY.  
Made by American Terra Cotta & Ceramic Company.  
George L. Harvey, Architect.



NURSES' HOME, BELLEVUE HOSPITAL, NEW YORK.  
Harvard front brick furnished by Carter, Black & Ayers.  
Parish & Schroeder, Architects.

name of Donn & Deming, 808 Seventeenth street, Washington, D. C.

The architectural terra cotta used in St. Rose's Parochial School, at Chelsea, Mass., illustrated in the Plate Forms of this issue, was furnished by the New Jersey Terra Cotta Company.

Sayre & Fisher Company furnished the brick which were used in the house at Morristown, N. J.; Henry A. Macomb, architect, illustrated in the Plate Forms of this issue.

The New York Architectural Terra Cotta Company has secured the contract for furnishing the architectural terra

cotta for office building to be erected for Henry Birks & Sons, Ltd., at Vancouver, B. C. Somerville & Putnam are the architects.

Atlantic Architectural Terra Cotta in the Bank Building is the title of the latest booklet issued by the Atlantic Terra Cotta Company. Some fifteen bank buildings, in which architectural terra cotta has been used, are illustrated.

Sayre & Fisher Company's selected common brick were used throughout the



THE FIREMAN'S INSURANCE BUILDING,  
NEWARK, N. J.  
Architectural terra cotta furnished by South  
Amboy Terra Cotta Company.

Manual Training High School at Newark, N. J., illustrated in this number, E. F. Guilbert, architect.

The architectural terra cotta used in the construction of the church for St. Patrick's Parish, Brockton, Mass., illus-



ST. CECILIA SCHOOL, BROOKLYN, N. Y.  
Faced with Roman brick made by Ironclay Brick Company.  
T. H. Poole & Co., Architects.

trated in the Plate Forms of this issue, was furnished by the Atlantic Terra Cotta Company.

A united effort is being made toward the establishment of a far-reaching scheme for municipal housing in France.

A bill has been presented before Parliament authorizing the communes to build houses and lay out new neighborhoods, with a view of offering their inhabitants cheap and soundly built accommodations. The bill also provides that the city of Paris borrow the sum necessary.



DETAIL EXECUTED BY NEW JERSEY TERRA  
COTTA COMPANY.  
Nast & Springsteen, Architects.

**ONE HUNDRED BUNGALOWS**—THE TITLE OF A 120 PAGE BOOKLET WHICH CONTAINS ONE HUNDRED DESIGNS FOR HOUSES OF THE BUNGALOW TYPE SUBMITTED IN THE COMPETITION RECENTLY CONDUCTED BY THE BRICKBUILDER. PRICE, 50 CENTS. ROGERS & MANSON, BOSTON.

**THE NATCO HOUSE**—THE TITLE OF A NEW 72 PAGE BOOKLET WHICH CONTAINS A SELECTION OF DESIGNS SUBMITTED IN COMPETITION FOR A HOUSE TO BE BUILT OF TERRA COTTA HOLLOW TILE AT A COST OF SIX THOUSAND DOLLARS. ALSO ILLUSTRATIONS OF HOUSES BUILT OF THIS MATERIAL, TOGETHER WITH ARTICLES DESCRIBING CONSTRUCTION, ETC. PRICE, 50 CENTS. ROGERS & MANSON, BOSTON.

**Notice of Competition for Street Lighting Standards**

A competition for designs of ornamental street lighting fixtures is announced by the Business Men's Association and Municipal Art Society of Hartford, Connecticut. Copies of the pamphlet giving details as to the desired designs and information as to the prizes offered can be secured of the undersigned.

C. J. BENNETT, for the Business Men's Association.  
W. S. SCHULTZ, for the Municipal Art Society.

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**History.** Prof. H. L. Warren, A. M., F. A. I. A.

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**Drawing.** Mr. H. D. Murphy, Mr. H. B. Warren.

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For circulars and other information apply to Prof. H. L. Warren, Chairman of the Council of the School of Architecture, Harvard University, Cambridge, Mass.

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**BULLETIN**

RECENT WORK, illustrated in this issue of  
THE BRICKBUILDER

House at Topsfield, Mass. .... Plates 99-101

PAGE & FROTHINGHAM, Architects.

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